



04-01-05

10840060

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<110> Cyclacel Limited

Deak, Peter

Frenz, Lisa

Glover, David

Midgley, Carol

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<130> 10069/2012

<140> US 10/840,060

<141> 2004-05-05

<150> PCT/GB02/04780

<151> 2002-10-23

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<151> 2001-11-05

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<151> 2001-11-27

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Sequence listing as filed1.txt						
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Sequence listing as filed1.txt

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Sequence listing as filed1.txt

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Sequence listing as filed1.txt

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<211> 3275

Sequence listing as filed1.txt

<212> PRT

<213> Drosophila melanogaster

<400> 90

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Asp Pro Thr Asp Ile Ser Tyr Phe Leu Glu Glu Asn Leu Pro Asp Glu
20 25 30

Leu Val Ser Ser Asn Ser Gly Trp Ser Asp Gln Leu Thr Gly Gly Ala
35 40 45

Gly Gly Gly Asn Gly Gly Gly Gly Ala Ser Gly Val Thr Thr Asn Pro
50 55 60

Thr Ser Gly Pro Asn Pro Gly Gly Gly Pro Asn Lys Pro Ala Ala Gln
65 70 75 80

Gly Pro Gly Ser Gly Thr Gly Gly Val Gly Val Gly Val Asn Val Gly
85 90 95

Val Gly Gly Val Val Gly Val Gly Val Val Pro Ser Gln Met Asn Gly
100 105 110

Ala Gly Gly Gly Asn Gly Ser Gly Thr Gly Gly Asp Asp Gly Ser Gly
115 120 125

Asn Gly Ser Gly Ala Gly Asn Arg Ile Ser Gln Met Gln His Gln Gln
130 135 140

Leu Gln His Leu Leu Gln Gln Gln Gln Gln Gly Gln Lys Gly Ala Met
145 150 155 160

Val Val Pro Gly Met Gln Gln Leu Gly Ser Lys Ser Pro Asn Leu Gln
165 170 175

Ser Pro Asn Gln Gly Gly Met Gln Gln Val Val Gly Thr Gln Met Gly
180 185 190

Met Val Asn Ser Met Pro Met Ser Ile Ser Asn Asn Gly Asn Asn Gly
195 200 205

Met Asn Ala Ile Pro Gly Met Asn Thr Ile Ala Gln Gly Asn Leu Gly
210 215 220

Sequence listing as filed1.txt

Asn Met Val Leu Thr Asn Ser Val Gly Gly Gly Met Gly Gly Met Val
225 230 235 240

Asn His Leu Lys Gln Gln Pro Gly Gly Gly Gly Gly Gly Met Ile Asn
245 250 255

Ser Val Ser Val Pro Gly Gly Pro Gly Ala Gly Ala Gly Gly Val Gly
260 265 270

Ala Gly Gly Gly Gly Ala Val Ala Ala Asn Gln Gly Met His Met Gln
275 280 285

Asn Gly Pro Met Met Gly Arg Met Val Gly Gln Gln His Met Leu Arg
290 295 300

Gly Pro His Leu Met Gly Ala Ser Gly Gly Ala Gly Gly Pro Gly Asn
305 310 315 320

Gly Pro Gly Gly Gly Gly Pro Arg Met Gln Asn Pro Asn Met Gln Met
325 330 335

Thr Gln Leu Asn Ser Leu Pro Tyr Gly Val Gly Gln Tyr Gly Gly Pro
340 345 350

Gly Gly Gly Asn Asn Pro Gln Gln Gln Gln Gln Gln Gln Gln Gln
355 360 365

Leu Leu Ala Gln Gln Met Ala Gln Arg Gly Gly Val Val Pro Gly Met
370 375 380

Pro Gln Gly Asn Arg Pro Val Gly Thr Val Val Pro Met Ser Thr Leu
385 390 395 400

Gly Gly Asp Gly Ser Gly Pro Ala Gly Gln Leu Val Ser Gly Asn Pro
405 410 415

Gln Gln Gln Gln Met Leu Ala Gln Gln Gln Thr Gly Ala Met Gly Pro
420 425 430

Arg Pro Pro Gln Pro Asn Gln Leu Leu Gly His Pro Gly Gln Gln Gln
435 440 445

Gln Gln Gln Gln Gln Pro Gly Thr Ser Gln Gln Gln Gln Gln Gln
450 455 460

Gly Val Gly Ile Gly Gly Ala Gly Val Val Ala Asn Ala Gly Thr Val

Sequence listing as filed1.txt

465 470 475 480

Ala Gly Val Pro Ala Val Ala Gly Gly Gly Ala Gly Gly Ala Val Gln
 485 490 495

Ser Ser Gly Pro Gly Gly Ala Asn Arg Asp Val Pro Asp Asp Arg Lys
 500 505 510

Arg Gln Ile Gln Gln Gln Leu Met Leu Leu Leu His Ala His Lys Cys
 515 520 525

Asn Arg Arg Glu Asn Leu Asn Pro Asn Arg Glu Val Cys Asn Val Asn
 530 535 540

Tyr Cys Lys Ala Met Lys Ser Val Leu Ala His Met Gly Thr Cys Lys
545 550 555 560

Gln Ser Lys Asp Cys Thr Met Gln His Cys Ala Ser Ser Arg Gln Ile
 565 570 575

Leu Leu His Tyr Lys Thr Cys Gln Asn Ser Gly Cys Val Ile Cys Tyr
 580 585 590

Pro Phe Arg Gln Asn His Ser Val Phe Gln Asn Ala Asn Val Pro Pro
 595 600 605

Gly Gly Gly Pro Ala Gly Ile Gly Gly Ala Pro Pro Gly Gly Gly Gly
610 615 620

Ala Gly Gly Gly Ala Ala Gly Ala Gly Gly Asn Leu Gln Gln Gln Gln
625 630 635 640

Gln Gln Gln Gln Gln Gln Gln Gln Asn Gln Gln Pro Asn Leu Thr Gly
 645 650 655

Leu Val Val Asp Gly Lys Gln Gly Gln Gln Val Ala Pro Gly Gly Gly
 660 665 670

Gln Asn Thr Ala Ile Val Leu Pro Gln Gln Gln Gly Ala Gly Gly Ala
675 680 685

Pro Gly Ala Pro Lys Thr Pro Ala Asp Met Val Gln Gln Leu Thr Gln
690 695 700

Gln Gln Gln Gln Gln Gln Gln Gln Val His Gln Gln Gln Val Gln Gln
705 710 715 720

Sequence listing as filed1.txt

Gln Glu Leu Arg Arg Phe Asp Gly Met Ser Gln Gln Val Val Ala Gly
725 730 735

Gly Met Gln Gln Gln Gln Gln Gln Gly Leu Pro Pro Val Ile Arg Ile
740 745 750

Gln Gly Ala Gln Pro Ala Val Arg Val Leu Gly Pro Gly Gly Pro Gly
755 760 765

Gly Pro Ser Gly Pro Asn Val Leu Pro Asn Asp Val Asn Ser Leu His
770 775 780

Gln Gln Gln Gln Gln Met Leu Gln Gln Gln Gln Gln Gln Gly Gln Asn
785 790 795 800

Arg Arg Arg Gly Gly Leu Ala Thr Met Val Glu Gln Gln Gln Gln His
805 810 815

Gln Gln Gln Gln Gln Gln Pro Asn Pro Ala Gln Leu Gly Gly Asn Ile
820 825 830

Pro Ala Pro Leu Ser Val Asn Val Gly Gly Phe Gly Asn Thr Asn Phe
835 840 845

Gly Gly Ala Ala Ala Gly Gly Ala Val Gly Ala Asn Asp Lys Gln Gln
850 855 860

Leu Lys Val Ala Gln Val His Pro Gln Ser His Gly Val Gly Ala Gly
865 870 875 880

Gly Ala Ser Ala Gly Ala Gly Ala Ser Gly Gly Gln Val Ala Ala Gly
885 890 895

Ser Ser Val Leu Met Pro Ala Asp Thr Thr Gly Ser Gly Asn Ala Gly
900 905 910

Asn Pro Asn Gln Asn Ala Gly Gly Val Ala Gly Gly Ala Gly Gly Gly
915 920 925

Asn Gly Gly Asn Thr Gly Pro Pro Gly Asp Asn Glu Lys Asp Trp Arg
930 935 940

Glu Ser Val Thr Ala Asp Leu Arg Asn His Leu Val His Lys Leu Val
945 950 955 960

Gln Ala Ile Phe Pro Thr Ser Asp Pro Thr Thr Met Gln Asp Lys Arg
965 970 975

Sequence listing as filed1.txt

Met His Asn Leu Val Ser Tyr Ala Glu Lys Val Glu Lys Asp Met Tyr
980 985 990

Glu Met Ala Lys Ser Arg Ser Glu Tyr Tyr His Leu Leu Ala Glu Lys
995 1000 1005

Ile Tyr Lys Ile Gln Lys Glu Leu Glu Glu Lys Arg Leu Lys Arg
1010 1015 1020

Lys Glu Gln His Gln Gln Met Leu Met Gln Gln Gln Gly Val Ala
1025 1030 1035

Asn Pro Val Ala Gly Gly Ala Ala Gly Gly Ala Gly Ser Ala Ala
1040 1045 1050

Gly Val Ala Gly Gly Val Val Leu Pro Gln Gln Gln Gln Gln Gln
1055 1060 1065

Gln Gln Gln Gln Gln Gln Gly Gln Gln Pro Leu Gln Ser Cys
1070 1075 1080

Ile His Pro Ser Ile Ser Pro Met Gly Gly Val Met Pro Pro Gln
1085 1090 1095

Gln Leu Arg Pro Gln Gly Pro Pro Gly Ile Leu Gly Gln Gln Thr
1100 1105 1110

Ala Ala Gly Leu Gly Val Gly Val Gly Val Thr Asn Asn Met Val
1115 1120 1125

Thr Met Arg Ser His Ser Pro Gly Gly Asn Met Leu Ala Leu Gln
1130 1135 1140

Gln Gln Gln Arg Met Gln Phe Pro Gln Gln Gln Gln Gln Gln Pro
1145 1150 1155

Pro Gly Ser Gly Ala Gly Lys Met Leu Val Gly Pro Pro Gly Pro
1160 1165 1170

Ser Pro Gly Gly Met Val Val Asn Pro Ala Leu Ser Pro Tyr Gln
1175 1180 1185

Thr Thr Asn Val Leu Thr Ser Pro Val Pro Gly Gln Gln Gln Gln
1190 1195 1200

Gln Gln Phe Ile Asn Ala Asn Gly Gly Thr Gly Ala Asn Pro Gln
1205 1210 1215

Sequence listing as filed1.txt

Leu Ser Glu Ile Met Lys Gln Arg His Ile His Gln Gln Gln Gln
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 Gln Gln Gln Gln Gln Gln Gln Gly Met Leu Leu Pro Gln Ser
 1235 1240 1245
 Pro Phe Ser Asn Ser Thr Pro Leu Gln Gln Gln Gln Gln Gln Gln
 1250 1255 1260
 Gln Gln Gln Gln Gln Gln Gln Ala Thr Ser Asn Ser Phe Ser Ser
 1265 1270 1275
 Pro Met Gln Gln Gln Gln Gln Gly Gln Gln Gln Gln Gln Gln Lys
 1280 1285 1290
 Pro Gly Ser Val Leu Asn Asn Met Pro Pro Thr Pro Thr Ser Leu
 1295 1300 1305
 Glu Ala Leu Asn Ala Gly Ala Gly Ala Pro Gly Thr Gly Gly Ser
 1310 1315 1320
 Ala Ser Asn Val Thr Val Ser Ala Pro Ser Pro Ser Pro Gly Phe
 1325 1330 1335
 Leu Ser Asn Gly Pro Ser Ile Gly Thr Pro Ser Asn Asn Asn Asn
 1340 1345 1350
 Asn Ser Ser Ala Asn Asn Asn Pro Pro Ser Val Ser Ser Leu Met
 1355 1360 1365
 Gln Gln Pro Leu Ser Asn Arg Pro Gly Thr Pro Pro Tyr Ile Pro
 1370 1375 1380
 Ala Ser Pro Val Pro Ala Thr Ser Ala Ser Gly Leu Ala Ala Ser
 1385 1390 1395
 Ser Thr Pro Ala Ser Ala Ala Ala Thr Cys Ala Ser Ser Gly Ser
 1400 1405 1410
 Gly Ser Asn Ser Ser Ser Gly Ala Thr Ala Ala Gly Ala Ser Ser
 1415 1420 1425
 Thr Ser Ser Ser Ser Ala Gly Ser Gly Thr Pro Leu Ser Ser
 1430 1435 1440
 Val Ser Thr Pro Thr Ser Ala Thr Met Ala Thr Ser Ser Gly Gly

1445

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Sequence listing as filed1.txt

Ala	Pro	Asn	Ala	Gly	Asp	Lys	Lys	Lys	Lys	Cys	Gln	Phe	Asn	Pro
1685						1690					1695			
Glu	Glu	Leu	Arg	Thr	Ala	Leu	Leu	Pro	Thr	Leu	Glu	Lys	Leu	Tyr
1700						1705					1710			
Arg	Gln	Glu	Pro	Glu	Ser	Val	Pro	Phe	Arg	Tyr	Pro	Val	Asp	Pro
1715						1720					1725			
Gln	Ala	Leu	Gly	Ile	Pro	Asp	Tyr	Phe	Glu	Ile	Val	Lys	Lys	Pro
1730						1735					1740			
Met	Asp	Leu	Gly	Thr	Ile	Arg	Thr	Asn	Ile	Gln	Asn	Gly	Lys	Tyr
1745						1750					1755			
Ser	Asp	Pro	Trp	Glu	Tyr	Val	Asp	Asp	Val	Trp	Leu	Met	Phe	Asp
1760						1765					1770			
Asn	Ala	Trp	Leu	Tyr	Asn	Arg	Lys	Thr	Ser	Arg	Val	Tyr	Arg	Tyr
1775						1780					1785			
Cys	Thr	Lys	Leu	Ser	Glu	Val	Phe	Glu	Ala	Glu	Ile	Asp	Pro	Val
1790						1795					1800			
Met	Gln	Ala	Leu	Gly	Tyr	Cys	Cys	Gly	Arg	Lys	Tyr	Thr	Phe	Asn
1805						1810					1815			
Pro	Gln	Val	Leu	Cys	Cys	Tyr	Gly	Lys	Gln	Leu	Cys	Thr	Ile	Pro
1820						1825					1830			
Arg	Asp	Ala	Lys	Tyr	Tyr	Ser	Tyr	Gln	Asn	Ser	Leu	Lys	Glu	Tyr
1835						1840					1845			
Gly	Val	Ala	Ser	Asn	Arg	Tyr	Thr	Tyr	Cys	Gln	Lys	Cys	Phe	Asn
1850						1855					1860			
Asp	Ile	Gln	Gly	Asp	Thr	Val	Thr	Leu	Gly	Asp	Asp	Pro	Leu	Gln
1865						1870					1875			
Ser	Gln	Thr	Gln	Ile	Lys	Lys	Asp	Gln	Phe	Lys	Glu	Met	Lys	Asn
1880						1885					1890			
Asp	His	Leu	Glu	Leu	Glu	Pro	Phe	Val	Asn	Cys	Gln	Glu	Cys	Gly
1895						1900					1905			
Arg	Lys	Gln	His	Gln	Ile	Cys	Val	Leu	Trp	Leu	Asp	Ser	Ile	Trp
1910						1915					1920			

Sequence listing as filed1.txt

Pro Gly Gly Phe Val Cys Asp Asn Cys Leu Lys Lys Lys Asn Ser
1925 1930 1935

Lys Arg Lys Glu Asn Lys Phe Asn Ala Lys Arg Leu Pro Thr Thr
1940 1945 1950

Lys Leu Gly Val Tyr Ile Glu Thr Arg Val Asn Asn Phe Leu Lys
1955 1960 1965

Lys Lys Glu Ala Gly Ala Gly Glu Val His Ile Arg Val Val Ser
1970 1975 1980

Ser Ser Asp Lys Cys Val Glu Val Lys Pro Gly Met Arg Arg Arg
1985 1990 1995

Phe Val Glu Gln Gly Glu Met Met Asn Glu Phe Pro Tyr Arg Ala
2000 2005 2010

Lys Ala Leu Phe Ala Phe Glu Glu Val Asp Gly Ile Asp Val Cys
2015 2020 2025

Phe Phe Gly Met His Val Gln Glu Tyr Gly Ser Glu Cys Pro Ala
2030 2035 2040

Pro Asn Thr Arg Arg Val Tyr Ile Ala Tyr Leu Asp Ser Val His
2045 2050 2055

Phe Phe Arg Pro Arg Gln Tyr Arg Thr Ala Val Tyr His Glu Ile
2060 2065 2070

Leu Leu Gly Tyr Met Asp Tyr Val Lys Gln Leu Gly Tyr Thr Met
2075 2080 2085

Ala His Ile Trp Ala Cys Pro Pro Ser Glu Gly Asp Asp Tyr Ile
2090 2095 2100

Phe His Cys His Pro Thr Asp Gln Lys Ile Pro Lys Pro Lys Arg
2105 2110 2115

Leu Gln Glu Trp Tyr Lys Lys Met Leu Asp Lys Gly Met Ile Glu
2120 2125 2130

Arg Ile Ile Gln Asp Tyr Lys Asp Ile Leu Lys Gln Ala Met Glu
2135 2140 2145

Asp Lys Leu Gly Ser Ala Ala Glu Leu Pro Tyr Phe Glu Gly Asp
2150 2155 2160

Sequence listing as filed1.txt

Phe Trp Pro Asn Val Leu Glu Glu Ser Ile Lys Glu Leu Asp Gln
 2165 2170 2175
 Glu Glu Glu Glu Lys Arg Lys Gln Ala Glu Ala Ala Glu Ala Ala
 2180 2185 2190
 Ala Ala Ala Asn Leu Phe Ser Ile Glu Glu Asn Glu Val Ser Gly
 2195 2200 2205
 Asp Gly Lys Lys Lys Gly Gln Lys Lys Ala Lys Lys Ser Asn Lys
 2210 2215 2220
 Ser Lys Ala Ala Gln Arg Lys Asn Ser Lys Lys Ser Asn Glu His
 2225 2230 2235
 Gln Ser Gly Asn Asp Leu Ser Thr Lys Ile Tyr Ala Thr Met Glu
 2240 2245 2250
 Lys His Lys Glu Val Phe Phe Val Ile Arg Leu His Ser Ala Gln
 2255 2260 2265
 Ser Ala Ala Ser Leu Ala Pro Ile Gln Asp Pro Asp Pro Leu Leu
 2270 2275 2280
 Thr Cys Asp Leu Met Asp Gly Arg Asp Ala Phe Leu Thr Leu Ala
 2285 2290 2295
 Arg Asp Lys His Phe Glu Phe Ser Ser Leu Arg Arg Ala Gln Phe
 2300 2305 2310
 Ser Thr Leu Ser Met Leu Tyr Glu Leu His Asn Gln Gly Gln Asp
 2315 2320 2325
 Lys Phe Val Tyr Thr Cys Asn His Cys Lys Thr Ala Val Glu Thr
 2330 2335 2340
 Arg Tyr His Cys Thr Val Cys Asp Asp Phe Asp Leu Cys Ile Val
 2345 2350 2355
 Cys Lys Glu Lys Val Gly His Gln His Lys Met Glu Lys Leu Gly
 2360 2365 2370
 Phe Asp Ile Asp Asp Gly Ser Ala Leu Ala Asp His Lys Gln Ala
 2375 2380 2385
 Asn Pro Gln Glu Ala Arg Lys Gln Ser Ile Gln Arg Cys Ile Gln

2390

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Sequence listing as filed1.txt

Pro	Pro	Val	Met	Asn	Arg	Pro	Met	Gly	Gly	Ala	Gly	Pro	Asn	Gln
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Asn	Val	Val	Asn	Gln	Leu	Gly	Gly	Met	Gly	Val	Gly	Val	Glu	Gly
2645						2650					2655			
Val	Gly	Gly	Val	Gly	Val	Gly	Gly	Val	Gly	Gly	Val	Gly	Val	Asn
2660						2665					2670			
Gln	Leu	Asn	Ser	Gly	Gly	Gly	Asn	Thr	Pro	Gly	Ala	Pro	Ile	Ser
2675						2680					2685			
Gly	Pro	Gly	Met	Asn	Val	Asn	His	Leu	Met	Ser	Met	Asp	Gln	Trp
2690						2695					2700			
Gly	Gly	Gly	Gly	Ala	Gly	Gly	Gly	Gly	Ala	Asn	Pro	Gly	Gly	Gly
2705						2710					2715			
Asn	Pro	Gln	Ala	Arg	Tyr	Ala	Asn	Asn	Thr	Gly	Gly	Met	Arg	Gln
2720						2725					2730			
Pro	Thr	His	Val	Met	Gln	Thr	Asn	Leu	Ile	Pro	Pro	Gln	Gln	Gln
2735						2740					2745			
Gln	Gln	Met	Met	Gly	Gly	Leu	Gly	Gly	Pro	Asn	Gln	Leu	Gly	Gly
2750						2755					2760			
Gly	Gln	Met	Pro	Val	Gly	Gly	Gln	His	Gly	Gly	Met	Gly	Met	Gly
2765						2770					2775			
Met	Gly	Ala	Pro	Pro	Met	Ala	Gly	Thr	Val	Gly	Gly	Val	Arg	Pro
2780						2785					2790			
Ser	Pro	Gly	Ala	Gly	Gly	Gly	Gly	Gly	Ser	Ala	Thr	Gly	Gly	Gly
2795						2800					2805			
Leu	Asn	Thr	Gln	Gln	Leu	Ala	Leu	Ile	Met	Gln	Lys	Ile	Lys	Asn
2810						2815					2820			
Asn	Pro	Thr	Asn	Glu	Ser	Asn	Gln	His	Ile	Leu	Ala	Ile	Leu	Lys
2825						2830					2835			
Gln	Asn	Pro	Gln	Ile	Met	Ala	Ala	Ile	Ile	Lys	Gln	Arg	Gln	Gln
2840						2845					2850			
Ser	Gln	Asn	Asn	Ala	Ala	Ala	Gly	Gly	Gly	Ala	Pro	Gly	Pro	Gly
2855						2860					2865			

Sequence listing as filed1.txt

Gly	Ala	Leu	Gln	Gln	Gln	Gln	Ala	Gly	Asn	Gly	Pro	Gln	Asn	Pro
2870							2875				2880			
Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Val	Met	Gln	Gln
2885						2890					2895			
Gln	Gln	Met	Gln	His	Met	Met	Asn	Gln	Gln	Gln	Gly	Gly	Gly	Gly
2900						2905					2910			
Pro	Gln	Gln	Met	Asn	Pro	Asn	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Val
2915						2920					2925			
Asn	Leu	Met	Gln	Gln	Gln	Gln	Gln	Gly	Gly	Pro	Gly	Gly	Pro	Gly
2930						2935					2940			
Ser	Gly	Leu	Pro	Thr	Arg	Met	Pro	Asn	Met	Pro	Asn	Ala	Leu	Gly
2945						2950					2955			
Met	Leu	Gln	Ser	Leu	Pro	Pro	Asn	Met	Ser	Pro	Gly	Val	Ser	Thr
2960						2965					2970			
Gln	Gly	Gly	Met	Val	Pro	Asn	Gln	Asn	Trp	Asn	Lys	Met	Arg	Tyr
2975						2980					2985			
Met	Gln	Met	Ser	Gln	Tyr	Pro	Pro	Pro	Tyr	Pro	Gln	Arg	Gln	Arg
2990						2995					3000			
Gly	Pro	His	Met	Gly	Gly	Ala	Gly	Pro	Gly	Pro	Gly	Gln	Gln	Gln
3005						3010					3015			
Phe	Pro	Gly	Gly	Gly	Gly	Gly	Ala	Gly	Asn	Phe	Asn	Ala	Gly	Gly
3020						3025					3030			
Ala	Gly	Gly	Ala	Gly	Gly	Val	Val	Gly	Val	Gly	Gly	Val	Pro	Gly
3035						3040					3045			
Gly	Ala	Gly	Thr	Val	Pro	Gly	Gly	Asp	Gln	Tyr	Ser	Met	Ala	Asn
3050						3055					3060			
Ala	Ala	Ala	Ala	Ser	Asn	Met	Leu	Gln	Gln	Gln	Gln	Gly	Gln	Val
3065						3070					3075			
Gly	Val	Gly	Val	Gly	Val	Gly	Val	Lys	Pro	Gly	Pro	Gly	Gln	Gln
3080						3085					3090			
Gln	Gln	Gln	Met	Gly	Val	Gly	Met	Pro	Pro	Gly	Met	Gln	Gln	Gln
3095						3100					3105			

Sequence listing as filed1.txt

Gln Gln Gln Gln Gln Pro Leu Gln Gln Gln Gln Met Met Gln Val
 3110 3115 3120

Ala Met Pro Asn Ala Asn Ala Gln Asn Pro Ser Ala Val Val Gly
 3125 3130 3135

Gly Pro Asn Ala Gln Val Met Gly Pro Pro Thr Pro His Ser Leu
 3140 3145 3150

Gln Gln Gln Leu Met Gln Ser Ala Arg Ser Ser Pro Pro Ile Arg
 3155 3160 3165

Ser Pro Gln Pro Thr Pro Ser Pro Arg Ser Ala Pro Ser Pro Arg
 3170 3175 3180

Ala Ala Pro Ser Ala Ser Pro Arg Ala Gln Pro Ser Pro His His
 3185 3190 3195

Val Met Ser Ser His Ser Pro Ala Pro Gln Gly Pro Pro His Asp
 3200 3205 3210

Gly Met His Asn His Gly Met His His Gln Ser Pro Leu Pro Gly
 3215 3220 3225

Val Pro Gln Asp Val Gly Val Gly Val Gly Val Gly Val Gly Val
 3230 3235 3240

Gly Val Asn Val Asn Val Gly Asn Val Gly Val Gly Asn Ala Gly
 3245 3250 3255

Gly Ala Leu Pro Asp Ala Ser Asp Gln Leu Thr Lys Phe Val Glu
 3260 3265 3270

Arg Leu
 3275

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<211> 8147

<212> DNA

<213> Homo sapiens

<400> 91

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60

Sequence listing as filed1.txt

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ccccgctccg cccggccggc ccgctccgcc cggccctcgg cgcccgcccc ggcggccccg	180
ctcgctcttc ggctcggcct cccggagccc ggcggcgggc gcggcggcag cggcgggcggc	240
ggcgggcgaa cgggggggtg gggggccgcg gcggcgggcg cgaccccgct cggcgcatcg	300
tttttcctca cggcgggcggc ggcggcgggc cgcggggccg gagcggagcc cggagcccc	360
tcgtcgtcgg gccgcgagcg aattcattaa gtggggcgcg gggggggagc gaggcggcgg	420
cggcgggcgg accatgttct cggggactgc ctgagccgcc cggccggggc ccgtcgtcgc	480
cagccggggc cggggggggc gccggggcgc cggggcgccc ccaccgcgga gtgtcgcgct	540
cgggagggcg gcaggggatg agggggccgc ggccggcggc ggcggcgggc gccggggggc	600
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tgcaaacatc agtgggaatt gtacccacac aagcaattgc aacaggcccc actgcagatc	1860
ctgaaaaacg caaactgata cagcagcagc tggttctact gttcatgct cataagtgtc	1920
agagacgaga gcaagcaaac ggagaggttc gggcctgctc gctcccgcat tgtcgaacca	1980

Sequence listing as filed1.txt

tgaaaaacgt tttgaatcac atgacgcatt gtcaggctgg gaaagcctgc caagttgccc	2040
attgtgcatc ttcacgacaa atcatctctc attggaagaa ctgcacacga catgactgtc	2100
ctgtttgcct ccctttgaaa aatgccagtg acaagcgaaa ccaacaaacc atcctgggggt	2160
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taaggaaagg ctggcacgaa catgtcactc aggacctgcg gagccatcta gtgcataaac	2640
tcgtccaagc catcttccca acacctgatc ccgcagctct aaaggatcgc cgcattgaaa	2700
acctggtagc ctatgctaag aaagtggaag gggacatgta cgagtctgcc aacagcaggg	2760
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ccttggggaa cgtccagttg ccacaagcac ccatgggacc tcgtgcagcc tccccaatga	3060
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Sequence listing as filed1.txt						
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Sequence listing as filed1.txt

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acaagctccg	ccagcagcag	atccagcacc	gcctgcagca	ggcccagctc	atgcgccggc	6420
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caccgcccgg	gacccccaca	cagcagccca	gcacaccca	gacgccgag	ccccctgccc	6540
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cggcccagcc	ccctcctgca	gcggtggaag	cggctcggca	gatcgagcgt	gaggcccagc	6720
agcagcagca	cctgtaccgg	gtgaacatca	acaacagcat	gccccagga	cgcacgggca	6780
tggggacccc	ggggagccag	atggcccccg	tgagcctgaa	tgtgccccga	ccaaccagg	6840
tgagcgggcc	cgtcatgccc	agcatgcctc	ccgggcagtg	gcagcaggcg	ccccttcccc	6900
agcagcagcc	catgccaggc	ttgcccaggc	ctgtgatatc	catgcaggcc	caggcggccg	6960
tggctgggcc	ccggatgccc	agcgtgcagc	caccagagg	catctcacc	agcgtctctg	7020
aagacctgct	gcggaccctg	aagtcgcccc	gctcccctca	gcagcaacag	caggtgctga	7080
acattctcaa	atcaaaccgc	cagctaattg	cagctttcat	caaacagcgc	acagccaagt	7140
acgtggccaa	tcagcccggc	atgcagcccc	agcctggcct	ccagtcccag	cccggcatgc	7200
aaccccagcc	tggcatgcac	cagcagccca	gcctgcagaa	cctgaatgcc	atgcaggctg	7260
gcgtgccgcg	gcccgggtgtg	cctccacagc	agcaggcgat	gggaggcctg	aaccccagg	7320
gccaggcctt	gaacatcatg	aacccaggac	acaaccccaa	catggcgagt	atgaatccac	7380
agtaccgaga	aatgttacgg	aggcagctgc	tgacgagca	gcagcaacag	cagcagcaac	7440
aacagcagca	acagcagcag	cagcaaggga	gtgccggcat	ggctgggggc	atggcggggc	7500
acggccagtt	ccagcagcct	caaggacccg	gaggctaccc	accggccatg	cagcagcagc	7560
agcgcagtgca	gcagcatctc	ccccctccagg	gcagctccat	gggccagatg	gcggctcaga	7620

Sequence listing as filed1.txt

tgggacagct tggccagatg gggcagccgg ggctgggggc agacagcacc cccaacatcc	7680
agcaagccct gcagcagcgg attctgcagc aacagcagat gaagcagcag attgggtccc	7740
caggccagcc gaaccccatg agcccccagc aacacatgct ctcaggacag ccacaggcct	7800
cgcattctccc tggccagcag atcgccacgt cccttagtaa ccaggtgcgg tctccagccc	7860
ctgtccagtc tccacggccc cagtcccagc ctccacattc cagcccgtca ccacggatac	7920
agccccagcc ttcgccacac cacgtctcac cccagactgg ttccccccac cccggactcg	7980
cagtcaccat ggccagctcc atagatcagg gacacttggg gaaccccgaa cagagtgcaa	8040
tgctccccca gctgaacacc cccagcagga gtgcgctgtc cagcgaactg tccctgggtcg	8100
gggacaccac gggggacacg ctagagaagt ttgtggaggg cttgtag	8147

<210> 92

<211> 2442

<212> PRT

<213> Homo sapiens

<400> 92

Met	Ala	Glu	Asn	Leu	Leu	Asp	Gly	Pro	Pro	Asn	Pro	Lys	Arg	Ala	Lys
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Leu	Ser	Ser	Pro	Gly	Phe	Ser	Ala	Asn	Asp	Ser	Thr	Asp	Phe	Gly	Ser
			20					25					30		

Leu	Phe	Asp	Leu	Glu	Asn	Asp	Leu	Pro	Asp	Glu	Leu	Ile	Pro	Asn	Gly
		35					40					45			

Gly	Glu	Leu	Gly	Leu	Leu	Asn	Ser	Gly	Asn	Leu	Val	Pro	Asp	Ala	Ala
	50					55					60				

Ser	Lys	His	Lys	Gln	Leu	Ser	Glu	Leu	Leu	Arg	Gly	Gly	Ser	Gly	Ser
65					70					75					80

Ser	Ile	Asn	Pro	Gly	Ile	Gly	Asn	Val	Ser	Ala	Ser	Ser	Pro	Val	Gln
				85					90					95	

Gln	Gly	Leu	Gly	Gly	Gln	Ala	Gln	Gly	Gln	Pro	Asn	Ser	Ala	Asn	Met
			100					105					110		

Ala	Ser	Leu	Ser	Ala	Met	Gly	Lys	Ser	Pro	Leu	Ser	Gln	Gly	Asp	Ser
		115					120					125			

Sequence listing as filed1.txt

Ser Ala Pro Ser Leu Pro Lys Gln Ala Ala Ser Thr Ser Gly Pro Thr
130 135 140

Pro Ala Ala Ser Gln Ala Leu Asn Pro Gln Ala Gln Lys Gln Val Gly
145 150 155 160

Leu Ala Thr Ser Ser Pro Ala Thr Ser Gln Thr Gly Pro Gly Ile Cys
165 170 175

Met Asn Ala Asn Phe Asn Gln Thr His Pro Gly Leu Leu Asn Ser Asn
180 185 190

Ser Gly His Ser Leu Ile Asn Gln Ala Ser Gln Gly Gln Ala Gln Val
195 200 205

Met Asn Gly Ser Leu Gly Ala Ala Gly Arg Gly Arg Gly Ala Gly Met
210 215 220

Pro Tyr Pro Thr Pro Ala Met Gln Gly Ala Ser Ser Ser Val Leu Ala
225 230 235 240

Glu Thr Leu Thr Gln Val Ser Pro Gln Met Thr Gly His Ala Gly Leu
245 250 255

Asn Thr Ala Gln Ala Gly Gly Met Ala Lys Met Gly Ile Thr Gly Asn
260 265 270

Thr Ser Pro Phe Gly Gln Pro Phe Ser Gln Ala Gly Gly Gln Pro Met
275 280 285

Gly Ala Thr Gly Val Asn Pro Gln Leu Ala Ser Lys Gln Ser Met Val
290 295 300

Asn Ser Leu Pro Thr Phe Pro Thr Asp Ile Lys Asn Thr Ser Val Thr
305 310 315 320

Asn Val Pro Asn Met Ser Gln Met Gln Thr Ser Val Gly Ile Val Pro
325 330 335

Thr Gln Ala Ile Ala Thr Gly Pro Thr Ala Asp Pro Glu Lys Arg Lys
340 345 350

Leu Ile Gln Gln Gln Leu Val Leu Leu Leu His Ala His Lys Cys Gln
355 360 365

Arg Arg Glu Gln Ala Asn Gly Glu Val Arg Ala Cys Ser Leu Pro His
370 375 380

Sequence listing as filed1.txt

Cys Arg Thr Met Lys Asn Val Leu Asn His Met Thr His Cys Gln Ala
 385 390 395 400
 Gly Lys Ala Cys Gln Val Ala His Cys Ala Ser Ser Arg Gln Ile Ile
 405 410 415
 Ser His Trp Lys Asn Cys Thr Arg His Asp Cys Pro Val Cys Leu Pro
 420 425 430
 Leu Lys Asn Ala Ser Asp Lys Arg Asn Gln Gln Thr Ile Leu Gly Ser
 435 440 445
 Pro Ala Ser Gly Ile Gln Asn Thr Ile Gly Ser Val Gly Thr Gly Gln
 450 455 460
 Gln Asn Ala Thr Ser Leu Ser Asn Pro Asn Pro Ile Asp Pro Ser Ser
 465 470 475 480
 Met Gln Arg Ala Tyr Ala Ala Leu Gly Leu Pro Tyr Met Asn Gln Pro
 485 490 495
 Gln Thr Gln Leu Gln Pro Gln Val Pro Gly Gln Gln Pro Ala Gln Pro
 500 505 510
 Gln Thr His Gln Gln Met Arg Thr Leu Asn Pro Leu Gly Asn Asn Pro
 515 520 525
 Met Asn Ile Pro Ala Gly Gly Ile Thr Thr Asp Gln Gln Pro Pro Asn
 530 535 540
 Leu Ile Ser Glu Ser Ala Leu Pro Thr Ser Leu Gly Ala Thr Asn Pro
 545 550 555 560
 Leu Met Asn Asp Gly Ser Asn Ser Gly Asn Ile Gly Thr Leu Ser Thr
 565 570 575
 Ile Pro Thr Ala Ala Pro Pro Ser Ser Thr Gly Val Arg Lys Gly Trp
 580 585 590
 His Glu His Val Thr Gln Asp Leu Arg Ser His Leu Val His Lys Leu
 595 600 605
 Val Gln Ala Ile Phe Pro Thr Pro Asp Pro Ala Ala Leu Lys Asp Arg
 610 615 620
 Arg Met Glu Asn Leu Val Ala Tyr Ala Lys Lys Val Glu Gly Asp Met
 625 630 635 640

Sequence listing as filed1.txt

Tyr Glu Ser Ala Asn Ser Arg Asp Glu Tyr Tyr His Leu Leu Ala Glu
 645 650 655
 Lys Ile Tyr Lys Ile Gln Lys Glu Leu Glu Glu Lys Arg Arg Ser Arg
 660 665 670
 Leu His Lys Gln Gly Ile Leu Gly Asn Gln Pro Ala Leu Pro Ala Pro
 675 680 685
 Gly Ala Gln Pro Pro Val Ile Pro Gln Ala Gln Pro Val Arg Pro Pro
 690 695 700
 Asn Gly Pro Leu Ser Leu Pro Val Asn Arg Met Gln Val Ser Gln Gly
 705 710 715 720
 Met Asn Ser Phe Asn Pro Met Ser Leu Gly Asn Val Gln Leu Pro Gln
 725 730 735
 Ala Pro Met Gly Pro Arg Ala Ala Ser Pro Met Asn His Ser Val Gln
 740 745 750
 Met Asn Ser Met Gly Ser Val Pro Gly Met Ala Ile Ser Pro Ser Arg
 755 760 765
 Met Pro Gln Pro Pro Asn Met Met Gly Ala His Thr Asn Asn Met Met
 770 775 780
 Ala Gln Ala Pro Ala Gln Ser Gln Phe Leu Pro Gln Asn Gln Phe Pro
 785 790 795 800
 Ser Ser Ser Gly Ala Met Ser Val Gly Met Gly Gln Pro Pro Ala Gln
 805 810 815
 Thr Gly Val Ser Gln Gly Gln Val Pro Gly Ala Ala Leu Pro Asn Pro
 820 825 830
 Leu Asn Met Leu Gly Pro Gln Ala Ser Gln Leu Pro Cys Pro Pro Val
 835 840 845
 Thr Gln Ser Pro Leu His Pro Thr Pro Pro Pro Ala Ser Thr Ala Ala
 850 855 860
 Gly Met Pro Ser Leu Gln His Thr Thr Pro Pro Gly Met Thr Pro Pro
 865 870 875 880
 Gln Pro Ala Ala Pro Thr Gln Pro Ser Thr Pro Val Ser Ser Ser Gly
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Sequence listing as filed1.txt

885

890

895

Gln Thr Pro Thr Pro Thr Pro Gly Ser Val Pro Ser Ala Thr Gln Thr
900 905 910

Gln Ser Thr Pro Thr Val Gln Ala Ala Ala Gln Ala Gln Val Thr Pro
915 920 925

Gln Pro Gln Thr Pro Val Gln Pro Pro Ser Val Ala Thr Pro Gln Ser
930 935 940

Ser Gln Gln Gln Pro Thr Pro Val His Ala Gln Pro Pro Gly Thr Pro
945 950 955 960

Leu Ser Gln Ala Ala Ala Ser Ile Asp Asn Arg Val Pro Thr Pro Ser
965 970 975

Ser Val Ala Ser Ala Glu Thr Asn Ser Gln Gln Pro Gly Pro Asp Val
980 985 990

Pro Val Leu Glu Met Lys Thr Glu Thr Gln Ala Glu Asp Thr Glu Pro
995 1000 1005

Asp Pro Gly Glu Ser Lys Gly Glu Pro Arg Ser Glu Met Met Glu
1010 1015 1020

Glu Asp Leu Gln Gly Ala Ser Gln Val Lys Glu Glu Thr Asp Ile
1025 1030 1035

Ala Glu Gln Lys Ser Glu Pro Met Glu Val Asp Glu Lys Lys Pro
1040 1045 1050

Glu Val Lys Val Glu Val Lys Glu Glu Glu Glu Ser Ser Ser Asn
1055 1060 1065

Gly Thr Ala Ser Gln Ser Thr Ser Pro Ser Gln Pro Arg Lys Lys
1070 1075 1080

Ile Phe Lys Pro Glu Glu Leu Arg Gln Ala Leu Met Pro Thr Leu
1085 1090 1095

Glu Ala Leu Tyr Arg Gln Asp Pro Glu Ser Leu Pro Phe Arg Gln
1100 1105 1110

Pro Val Asp Pro Gln Leu Leu Gly Ile Pro Asp Tyr Phe Asp Ile
1115 1120 1125

Sequence listing as filed1.txt

Val	Lys	Asn	Pro	Met	Asp	Leu	Ser	Thr	Ile	Lys	Arg	Lys	Leu	Asp
1130						1135					1140			
Thr	Gly	Gln	Tyr	Gln	Glu	Pro	Trp	Gln	Tyr	Val	Asp	Asp	Val	Trp
1145						1150					1155			
Leu	Met	Phe	Asn	Asn	Ala	Trp	Leu	Tyr	Asn	Arg	Lys	Thr	Ser	Arg
1160						1165					1170			
Val	Tyr	Lys	Phe	Cys	Ser	Lys	Leu	Ala	Glu	Val	Phe	Glu	Gln	Glu
1175						1180					1185			
Ile	Asp	Pro	Val	Met	Gln	Ser	Leu	Gly	Tyr	Cys	Cys	Gly	Arg	Lys
1190						1195					1200			
Tyr	Glu	Phe	Ser	Pro	Gln	Thr	Leu	Cys	Cys	Tyr	Gly	Lys	Gln	Leu
1205						1210					1215			
Cys	Thr	Ile	Pro	Arg	Asp	Ala	Ala	Tyr	Tyr	Ser	Tyr	Gln	Asn	Arg
1220						1225					1230			
Tyr	His	Phe	Cys	Glu	Lys	Cys	Phe	Thr	Glu	Ile	Gln	Gly	Glu	Asn
1235						1240					1245			
Val	Thr	Leu	Gly	Asp	Asp	Pro	Ser	Gln	Pro	Gln	Thr	Thr	Ile	Ser
1250						1255					1260			
Lys	Asp	Gln	Phe	Glu	Lys	Lys	Lys	Asn	Asp	Thr	Leu	Asp	Pro	Glu
1265						1270					1275			
Pro	Phe	Val	Asp	Cys	Lys	Glu	Cys	Gly	Arg	Lys	Met	His	Gln	Ile
1280						1285					1290			
Cys	Val	Leu	His	Tyr	Asp	Ile	Ile	Trp	Pro	Ser	Gly	Phe	Val	Cys
1295						1300					1305			
Asp	Asn	Cys	Leu	Lys	Lys	Thr	Gly	Arg	Pro	Arg	Lys	Glu	Asn	Lys
1310						1315					1320			
Phe	Ser	Ala	Lys	Arg	Leu	Gln	Thr	Thr	Arg	Leu	Gly	Asn	His	Leu
1325						1330					1335			
Glu	Asp	Arg	Val	Asn	Lys	Phe	Leu	Arg	Arg	Gln	Asn	His	Pro	Glu
1340						1345					1350			
Ala	Gly	Glu	Val	Phe	Val	Arg	Val	Val	Ala	Ser	Ser	Asp	Lys	Thr
1355						1360					1365			

Sequence listing as filed1.txt

Val	Glu	Val	Lys	Pro	Gly	Met	Lys	Ser	Arg	Phe	Val	Asp	Ser	Gly
	1370					1375						1380		
Glu	Met	Ser	Glu	Ser	Phe	Pro	Tyr	Arg	Thr	Lys	Ala	Leu	Phe	Ala
	1385					1390					1395			
Phe	Glu	Glu	Ile	Asp	Gly	Val	Asp	Val	Cys	Phe	Phe	Gly	Met	His
	1400					1405					1410			
Val	Gln	Glu	Tyr	Gly	Ser	Asp	Cys	Pro	Pro	Pro	Asn	Thr	Arg	Arg
	1415					1420					1425			
Val	Tyr	Ile	Ser	Tyr	Leu	Asp	Ser	Ile	His	Phe	Phe	Arg	Pro	Arg
	1430					1435					1440			
Cys	Leu	Arg	Thr	Ala	Val	Tyr	His	Glu	Ile	Leu	Ile	Gly	Tyr	Leu
	1445					1450					1455			
Glu	Tyr	Val	Lys	Lys	Leu	Gly	Tyr	Val	Thr	Gly	His	Ile	Trp	Ala
	1460					1465					1470			
Cys	Pro	Pro	Ser	Glu	Gly	Asp	Asp	Tyr	Ile	Phe	His	Cys	His	Pro
	1475					1480					1485			
Pro	Asp	Gln	Lys	Ile	Pro	Lys	Pro	Lys	Arg	Leu	Gln	Glu	Trp	Tyr
	1490					1495					1500			
Lys	Lys	Met	Leu	Asp	Lys	Ala	Phe	Ala	Glu	Arg	Ile	Ile	His	Asp
	1505					1510					1515			
Tyr	Lys	Asp	Ile	Phe	Lys	Gln	Ala	Thr	Glu	Asp	Arg	Leu	Thr	Ser
	1520					1525					1530			
Ala	Lys	Glu	Leu	Pro	Tyr	Phe	Glu	Gly	Asp	Phe	Trp	Pro	Asn	Val
	1535					1540					1545			
Leu	Glu	Glu	Ser	Ile	Lys	Glu	Leu	Glu	Gln	Glu	Glu	Glu	Glu	Arg
	1550					1555					1560			
Lys	Lys	Glu	Glu	Ser	Thr	Ala	Ala	Ser	Glu	Thr	Thr	Glu	Gly	Ser
	1565					1570					1575			
Gln	Gly	Asp	Ser	Lys	Asn	Ala	Lys	Lys	Lys	Asn	Asn	Lys	Lys	Thr
	1580					1585					1590			
Asn	Lys	Asn	Lys	Ser	Ser	Ile	Ser	Arg	Ala	Asn	Lys	Lys	Lys	Pro
	1595					1600					1605			

Sequence listing as filed1.txt

Ser	Met	Pro	Asn	Val	Ser	Asn	Asp	Leu	Ser	Gln	Lys	Leu	Tyr	Ala
	1610					1615					1620			
Thr	Met	Glu	Lys	His	Lys	Glu	Val	Phe	Phe	Val	Ile	His	Leu	His
	1625					1630					1635			
Ala	Gly	Pro	Val	Ile	Asn	Thr	Leu	Pro	Pro	Ile	Val	Asp	Pro	Asp
	1640					1645					1650			
Pro	Leu	Leu	Ser	Cys	Asp	Leu	Met	Asp	Gly	Arg	Asp	Ala	Phe	Leu
	1655					1660					1665			
Thr	Leu	Ala	Arg	Asp	Lys	His	Trp	Glu	Phe	Ser	Ser	Leu	Arg	Arg
	1670					1675					1680			
Ser	Lys	Trp	Ser	Thr	Leu	Cys	Met	Leu	Val	Glu	Leu	His	Thr	Gln
	1685					1690					1695			
Gly	Gln	Asp	Arg	Phe	Val	Tyr	Thr	Cys	Asn	Glu	Cys	Lys	His	His
	1700					1705					1710			
Val	Glu	Thr	Arg	Trp	His	Cys	Thr	Val	Cys	Glu	Asp	Tyr	Asp	Leu
	1715					1720					1725			
Cys	Ile	Asn	Cys	Tyr	Asn	Thr	Lys	Ser	His	Ala	His	Lys	Met	Val
	1730					1735					1740			
Lys	Trp	Gly	Leu	Gly	Leu	Asp	Asp	Glu	Gly	Ser	Ser	Gln	Gly	Glu
	1745					1750					1755			
Pro	Gln	Ser	Lys	Ser	Pro	Gln	Glu	Ser	Arg	Arg	Leu	Ser	Ile	Gln
	1760					1765					1770			
Arg	Cys	Ile	Gln	Ser	Leu	Val	His	Ala	Cys	Gln	Cys	Arg	Asn	Ala
	1775					1780					1785			
Asn	Cys	Ser	Leu	Pro	Ser	Cys	Gln	Lys	Met	Lys	Arg	Val	Val	Gln
	1790					1795					1800			
His	Thr	Lys	Gly	Cys	Lys	Arg	Lys	Thr	Asn	Gly	Gly	Cys	Pro	Val
	1805					1810					1815			
Cys	Lys	Gln	Leu	Ile	Ala	Leu	Cys	Cys	Tyr	His	Ala	Lys	His	Cys
	1820					1825					1830			
Gln	Glu	Asn	Lys	Cys	Pro	Val	Pro	Phe	Cys	Leu	Asn	Ile	Lys	His

1835

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Sequence listing as filed1.txt

Leu	Lys	Ser	Pro	Ser	Ser	Pro	Gln	Gln	Gln	Gln	Gln	Val	Leu	Asn
2075						2080						2085		
Ile	Leu	Lys	Ser	Asn	Pro	Gln	Leu	Met	Ala	Ala	Phe	Ile	Lys	Gln
2090						2095					2100			
Arg	Thr	Ala	Lys	Tyr	Val	Ala	Asn	Gln	Pro	Gly	Met	Gln	Pro	Gln
2105						2110					2115			
Pro	Gly	Leu	Gln	Ser	Gln	Pro	Gly	Met	Gln	Pro	Gln	Pro	Gly	Met
2120						2125					2130			
His	Gln	Gln	Pro	Ser	Leu	Gln	Asn	Leu	Asn	Ala	Met	Gln	Ala	Gly
2135						2140					2145			
Val	Pro	Arg	Pro	Gly	Val	Pro	Pro	Gln	Gln	Gln	Ala	Met	Gly	Gly
2150						2155					2160			
Leu	Asn	Pro	Gln	Gly	Gln	Ala	Leu	Asn	Ile	Met	Asn	Pro	Gly	His
2165						2170					2175			
Asn	Pro	Asn	Met	Ala	Ser	Met	Asn	Pro	Gln	Tyr	Arg	Glu	Met	Leu
2180						2185					2190			
Arg	Arg	Gln	Leu	Leu	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln
2195						2200					2205			
Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gly	Ser	Ala	Gly	Met	Ala	Gly
2210						2215					2220			
Gly	Met	Ala	Gly	His	Gly	Gln	Phe	Gln	Gln	Pro	Gln	Gly	Pro	Gly
2225						2230					2235			
Gly	Tyr	Pro	Pro	Ala	Met	Gln	Gln	Gln	Gln	Arg	Met	Gln	Gln	His
2240						2245					2250			
Leu	Pro	Leu	Gln	Gly	Ser	Ser	Met	Gly	Gln	Met	Ala	Ala	Gln	Met
2255						2260					2265			
Gly	Gln	Leu	Gly	Gln	Met	Gly	Gln	Pro	Gly	Leu	Gly	Ala	Asp	Ser
2270						2275					2280			
Thr	Pro	Asn	Ile	Gln	Gln	Ala	Leu	Gln	Gln	Arg	Ile	Leu	Gln	Gln
2285						2290					2295			
Gln	Gln	Met	Lys	Gln	Gln	Ile	Gly	Ser	Pro	Gly	Gln	Pro	Asn	Pro
2300						2305					2310			

Sequence listing as filed1.txt

Met Ser Pro Gln Gln His Met Leu Ser Gly Gln Pro Gln Ala Ser
 2315 2320 2325

His Leu Pro Gly Gln Gln Ile Ala Thr Ser Leu Ser Asn Gln Val
 2330 2335 2340

Arg Ser Pro Ala Pro Val Gln Ser Pro Arg Pro Gln Ser Gln Pro
 2345 2350 2355

Pro His Ser Ser Pro Ser Pro Arg Ile Gln Pro Gln Pro Ser Pro
 2360 2365 2370

His His Val Ser Pro Gln Thr Gly Ser Pro His Pro Gly Leu Ala
 2375 2380 2385

Val Thr Met Ala Ser Ser Ile Asp Gln Gly His Leu Gly Asn Pro
 2390 2395 2400

Glu Gln Ser Ala Met Leu Pro Gln Leu Asn Thr Pro Ser Arg Ser
 2405 2410 2415

Ala Leu Ser Ser Glu Leu Ser Leu Val Gly Asp Thr Thr Gly Asp
 2420 2425 2430

Thr Leu Glu Lys Phe Val Glu Gly Leu
 2435 2440

<210> 93

<211> 1363

<212> DNA

<213> Drosophila melanogaster

<400> 93

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ggatggacaa gatgcggata ttgaaggaaa gtcgccccga gataatcgtc ggtggcaa	180
atcgggtgat caggaagatt ggaagcggat cgtttggcga catttacctg ggcagtagca	240
tccagagcgg cgaagaagtg gccatcaaga tggagagcgc ccacgcccgc catccgcagc	300
tgttgtacga ggccaagctg taccgcattc tgagcggcgg cgttggattc cctcgtatac	360
gtcaccatgg caaggaaaag aacttcaaca ccctgggtcat ggacctgctg ggaccctcgc	420
tggaggatct gttcaatttc tgtacgcgcc atttcacaat caaaacgggt ctgatgctcg	480

Sequence listing as filed1.txt

tcgaccagat gatcggacgc ttggagtaca tccatctcaa gtgcttcac	catcgcgaca	540	
tcaagccgga taacttccta atgggcattg gtcggcactg caataagctg	ttcctgatcg	600	
atttcggtct ggccaagaag ttccgcgac	cgcacacgcg ccatcacatc gtttaccgcg	660	
aggacaagaa cctcaccggc actgcccgc	atgcctcgat caatgcccac	ctgggcatcg	720
agcagtcgcg gcgtgacgac atggaatcgc ttggatacgt gatgatgtac	ttcaatcgcg	780	
gcgtactgcc atggcaaggc atgaaggcca acaccaagca gcagaaatac	gagaagatct	840	
ccgaaaagaa gatgtccacg cccatcgagg tcctctgcaa gggctcgccg	gccgagttct	900	
ccatgtatct gaactattgt cgtagcctgc gcttcgagga gcagccagat	tacatgtacc	960	
tacgtcaatt gttccgcata ctgttcagaa cgctgaacca tcagtatgac	tacatctacg	1020	
actggacaat gctgaagcag aagacccatc agggtaacc caatccagct	atactcttgg	1080	
agcaattgga caaggacaag gagaagcaga acggcaagcc cctgatcgcg	gactaagagc	1140	
tgcagcgc	at tcagacgaat ggggggagtg catcagagaa ggagaacgtg	gatgcgtgga	1200
tgtaa	atgac gttgatgtgg gcgaaaggcc cggcaaggag cggagcaa	atgaaacaga	1260
cgcaaccgta aaattgagta acaccagcgg tcgtccgaat gtttctta	at	attaatttaa	1320
attcaatact aaacaaataa ggaaccacaa acaagcaagc	aac	1363	

<210> 94

<211> 337

<212> PRT

<213> Drosophila melanogaster

<400> 94

Met	Asp	Lys	Met	Arg	Ile	Leu	Lys	Glu	Ser	Arg	Pro	Glu	Ile	Ile	Val
1				5					10					15	

Gly	Gly	Lys	Tyr	Arg	Val	Ile	Arg	Lys	Ile	Gly	Ser	Gly	Ser	Phe	Gly
			20					25					30		

Asp	Ile	Tyr	Leu	Gly	Met	Ser	Ile	Gln	Ser	Gly	Glu	Glu	Val	Ala	Ile
		35					40					45			

Lys	Met	Glu	Ser	Ala	His	Ala	Arg	His	Pro	Gln	Leu	Leu	Tyr	Glu	Ala
	50					55					60				

Lys	Leu	Tyr	Arg	Ile	Leu	Ser	Gly	Gly	Val	Gly	Phe	Pro	Arg	Ile	Arg
65					70					75					80

Sequence listing as filed1.txt

His His Gly Lys Glu Lys Asn Phe Asn Thr Leu Val Met Asp Leu Leu
85 90 95

Gly Pro Ser Leu Glu Asp Leu Phe Asn Phe Cys Thr Arg His Phe Thr
100 105 110

Ile Lys Thr Val Leu Met Leu Val Asp Gln Met Ile Gly Arg Leu Glu
115 120 125

Tyr Ile His Leu Lys Cys Phe Ile His Arg Asp Ile Lys Pro Asp Asn
130 135 140

Phe Leu Met Gly Ile Gly Arg His Cys Asn Lys Leu Phe Leu Ile Asp
145 150 155 160

Phe Gly Leu Ala Lys Lys Phe Arg Asp Pro His Thr Arg His His Ile
165 170 175

Val Tyr Arg Glu Asp Lys Asn Leu Thr Gly Thr Ala Arg Tyr Ala Ser
180 185 190

Ile Asn Ala His Leu Gly Ile Glu Gln Ser Arg Arg Asp Asp Met Glu
195 200 205

Ser Leu Gly Tyr Val Met Met Tyr Phe Asn Arg Gly Val Leu Pro Trp
210 215 220

Gln Gly Met Lys Ala Asn Thr Lys Gln Gln Lys Tyr Glu Lys Ile Ser
225 230 235 240

Glu Lys Lys Met Ser Thr Pro Ile Glu Val Leu Cys Lys Gly Ser Pro
245 250 255

Ala Glu Phe Ser Met Tyr Leu Asn Tyr Cys Arg Ser Leu Arg Phe Glu
260 265 270

Glu Gln Pro Asp Tyr Met Tyr Leu Arg Gln Leu Phe Arg Ile Leu Phe
275 280 285

Arg Thr Leu Asn His Gln Tyr Asp Tyr Ile Tyr Asp Trp Thr Met Leu
290 295 300

Lys Gln Lys Thr His Gln Gly Gln Pro Asn Pro Ala Ile Leu Leu Glu
305 310 315 320

Gln Leu Asp Lys Asp Lys Glu Lys Gln Asn Gly Lys Pro Leu Ile Ala
325 330 335

Sequence listing as filed1.txt

Asp

<210> 95

<211> 1661

<212> DNA

<213> *Drosophila melanogaster*

<400> 95

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caaaactagc tgcgaactcg tgcaatatct cataaactga atgggaaaac aacgataacg	180
acgaaagaaa acgaaaacgg atctgcgacg aaattttccc cgttccggtt ttttttctcc	240
accagcagca gaagcagcag agcaaaagca gcgaatatat ttgtaaaaga gagccccaac	300
cttgagaaaa aacaaccagc agggcaataa ttagttgaat ttatcgtctg ctgtttttca	360
agtgaacgcg tccaactggt tttgaagcga agcgcttagg cggaggagca gctagccagg	420
atggacaaga tgcggatatt gaaggaaagt cgccccgaga taatcgtcgg tggcaaatat	480
cgggtgatca ggaagattgg aagcggatcg tttggcgaca ttacctggg catgagcatc	540
cagagcggcg aagaagtggc catcaagatg gagagcgccc acgcccgcc tccgcagctg	600
ttgtacgagg ccaagctgta ccgcattctg agcggcgggc ttggattccc tcgtatacgt	660
caccatggca aggaaaagaa cttcaacacc ctggtcatgg acctgctggg accctcgtg	720
gaggatctgt tcaatttctg tacgcgccat ttcacaatca aaacggttct gatgctcgtc	780
gaccagatga tcggacgctt ggagtacatc catctcaagt gttcatcca tcgacgacatc	840
aagccggata acttcctaataa gggcattggt cggcactgca ataagctggt cctgatcgat	900
ttcgggtctgg ccaagaagtt ccgcgatccg cacacgcgcc atcacatcgt ttaccgcgag	960
gacaagaacc tcaccggcac tgcccgtat gcctcgatca atgcccattt gggcatcgag	1020
cagtcgcggc gtgacgacat ggaatcgctt ggatacgtga tgatgtactt caatcgcggc	1080
gtactgccat ggcaaggcat gaaggccaac accaagcagc agaaatacga gaagatctcc	1140
gaaaagaaga tgtccacgcc catcgaggct ctctgcaagg gctcgccggc cgagttctcc	1200
atgtatctga actattgtcg tagcctgcgc ttcgaggagc agccagatta catgtacct	1260
cgtcaattgt tccgcatact gttcagaacg ctgaaccatc agtatgacta catctacgac	1320
tggacaatgc tgaagcagaa gacccatcag ggtcaacca atccagctat actcttgagg	1380

Sequence listing as filed1.txt

caattggaca aggacaagga gaagcagaac ggcaagcccc tgatcgcgga ctaagagctg 1440
cagcgcattc agacgaatgg ggggagtgca tcagagaagg agaacgtgga tgcgtggatg 1500
taaatgacgt tgatgtgggc gaaaggcccg gcaaggagcg gagcaaatat gaaacagacg 1560
caaccgtaaa attgagtaac accagcggtc gtccgaatgt ttcttaatat taatttaaatt 1620
tcaataactaa acaaataagg aaccacaaac aagcaagcaa c 1661

<210> 96

<211> 337

<212> PRT

<213> Drosophila melanogaster

<400> 96

Met Asp Lys Met Arg Ile Leu Lys Glu Ser Arg Pro Glu Ile Ile Val
1 5 10 15
Gly Gly Lys Tyr Arg Val Ile Arg Lys Ile Gly Ser Gly Ser Phe Gly
20 25 30
Asp Ile Tyr Leu Gly Met Ser Ile Gln Ser Gly Glu Glu Val Ala Ile
35 40 45
Lys Met Glu Ser Ala His Ala Arg His Pro Gln Leu Leu Tyr Glu Ala
50 55 60
Lys Leu Tyr Arg Ile Leu Ser Gly Gly Val Gly Phe Pro Arg Ile Arg
65 70 75 80
His His Gly Lys Glu Lys Asn Phe Asn Thr Leu Val Met Asp Leu Leu
85 90 95
Gly Pro Ser Leu Glu Asp Leu Phe Asn Phe Cys Thr Arg His Phe Thr
100 105 110
Ile Lys Thr Val Leu Met Leu Val Asp Gln Met Ile Gly Arg Leu Glu
115 120 125
Tyr Ile His Leu Lys Cys Phe Ile His Arg Asp Ile Lys Pro Asp Asn
130 135 140
Phe Leu Met Gly Ile Gly Arg His Cys Asn Lys Leu Phe Leu Ile Asp
145 150 155 160

Sequence listing as filed1.txt

Phe Gly Leu Ala Lys Lys Phe Arg Asp Pro His Thr Arg His His Ile
165 170 175

Val Tyr Arg Glu Asp Lys Asn Leu Thr Gly Thr Ala Arg Tyr Ala Ser
180 185 190

Ile Asn Ala His Leu Gly Ile Glu Gln Ser Arg Arg Asp Asp Met Glu
195 200 205

Ser Leu Gly Tyr Val Met Met Tyr Phe Asn Arg Gly Val Leu Pro Trp
210 215 220

Gln Gly Met Lys Ala Asn Thr Lys Gln Gln Lys Tyr Glu Lys Ile Ser
225 230 235 240

Glu Lys Lys Met Ser Thr Pro Ile Glu Val Leu Cys Lys Gly Ser Pro
245 250 255

Ala Glu Phe Ser Met Tyr Leu Asn Tyr Cys Arg Ser Leu Arg Phe Glu
260 265 270

Glu Gln Pro Asp Tyr Met Tyr Leu Arg Gln Leu Phe Arg Ile Leu Phe
275 280 285

Arg Thr Leu Asn His Gln Tyr Asp Tyr Ile Tyr Asp Trp Thr Met Leu
290 295 300

Lys Gln Lys Thr His Gln Gly Gln Pro Asn Pro Ala Ile Leu Leu Glu
305 310 315 320

Gln Leu Asp Lys Asp Lys Glu Lys Gln Asn Gly Lys Pro Leu Ile Ala
325 330 335

Asp

<210> 97

<211> 1259

<212> DNA

<213> Homo sapiens

<400> 97

ccgcctccgt gttccgtttc ctgccgccct cctctcgtag ccttgccctag tgtggagccc 60

caggcctccg tcctcttccc agagggtgtcg aggcttggcc ccagcctcca tcttcgtctc 120

Sequence listing as filed1.txt

tcaggatggc gagtagcagc ggctccaagg ctgaattcat tgtcgggtggg aaatataaac	180
tggtacggaa gatcgggtct ggctccttcg gggacatcta tttggcgatc aacatcacca	240
acggcgagga agtggcactg aagctagaat ctcagaaggc caggcatccc cagttgctgt	300
acgagagcaa gctctataag attcttcaag gtgggggttg catccccac atacggtggt	360
atggtcagga aaaagactac aatgtactag tcatggatct tctgggacct agcctcgaag	420
acctcttcaa tttctgttca agaaggttca caatgaaaac tgtacttatg ttagctgacc	480
agatgatcag tagaattgaa tatgtgcata caaagaattt tatacacaga gacattaaac	540
cagataactt cctaattgggt attgggcgtc actgtaataa gttattcctt attgattttg	600
gtttggccaa aaagtacaga gacaacagga caaggcaaca cataccatac agagaagata	660
aaaacctcac tggcactgcc cgatatgcta gcatcaatgc acatcttggt attgagcaga	720
gtcgccgaga tgacatggaa tcattaggat atgttttgat gtattttaat agaaccagcc	780
tgccatggca agggctaaag gctgcaacaa agaaacaaa atatgaaaag attagtgaag	840
agaagatgtc cacgcctgtt gaagttttat gtaaggggtt tcctgcagaa tttgcgatgt	900
acttaacta ttgtcgtggg ctacgctttg aggaagcccc agattacatg tatctgaggc	960
agctattccg cattcttttc aggaccctga accatcaata tgactacaca tttgattgga	1020
caatgttaaa gcagaaagca gcacagcagg cagcctcttc aagtgggcag ggtcagcagg	1080
cccaaaccac cacaggcaag caaactgaca aatccaagag taacatgaaa ggtttcta	1140
ttctaagcat gaattgagga acagaagaag cagacgagat gatcggagca gcatttgttt	1200
ctccccaaat ctagaaattt tagttcatat gtacactagc cagtggttgt ggacaacca	1259

<210> 98

<211> 337

<212> PRT

<213> Homo sapiens

<400> 98

Met	Ala	Ser	Ser	Ser	Gly	Ser	Lys	Ala	Glu	Phe	Ile	Val	Gly	Gly	Lys
1				5				10					15		

Tyr	Lys	Leu	Val	Arg	Lys	Ile	Gly	Ser	Gly	Ser	Phe	Gly	Asp	Ile	Tyr
		20					25					30			

Leu	Ala	Ile	Asn	Ile	Thr	Asn	Gly	Glu	Glu	Val	Ala	Leu	Lys	Leu	Glu
		35					40				45				

Sequence listing as filed1.txt

Ser Gln Lys Ala Arg His Pro Gln Leu Leu Tyr Glu Ser Lys Leu Tyr
50 55 60

Lys Ile Leu Gln Gly Gly Val Gly Ile Pro His Ile Arg Trp Tyr Gly
65 70 75 80

Gln Glu Lys Asp Tyr Asn Val Leu Val Met Asp Leu Leu Gly Pro Ser
85 90 95

Leu Glu Asp Leu Phe Asn Phe Cys Ser Arg Arg Phe Thr Met Lys Thr
100 105 110

Val Leu Met Leu Ala Asp Gln Met Ile Ser Arg Ile Glu Tyr Val His
115 120 125

Thr Lys Asn Phe Ile His Arg Asp Ile Lys Pro Asp Asn Phe Leu Met
130 135 140

Gly Ile Gly Arg His Cys Asn Lys Leu Phe Leu Ile Asp Phe Gly Leu
145 150 155 160

Ala Lys Lys Tyr Arg Asp Asn Arg Thr Arg Gln His Ile Pro Tyr Arg
165 170 175

Glu Asp Lys Asn Leu Thr Gly Thr Ala Arg Tyr Ala Ser Ile Asn Ala
180 185 190

His Leu Gly Ile Glu Gln Ser Arg Arg Asp Asp Met Glu Ser Leu Gly
195 200 205

Tyr Val Leu Met Tyr Phe Asn Arg Thr Ser Leu Pro Trp Gln Gly Leu
210 215 220

Lys Ala Ala Thr Lys Lys Gln Lys Tyr Glu Lys Ile Ser Glu Lys Lys
225 230 235 240

Met Ser Thr Pro Val Glu Val Leu Cys Lys Gly Phe Pro Ala Glu Phe
245 250 255

Ala Met Tyr Leu Asn Tyr Cys Arg Gly Leu Arg Phe Glu Glu Ala Pro
260 265 270

Asp Tyr Met Tyr Leu Arg Gln Leu Phe Arg Ile Leu Phe Arg Thr Leu
275 280 285

Asn His Gln Tyr Asp Tyr Thr Phe Asp Trp Thr Met Leu Lys Gln Lys
290 295 300

Sequence listing as filed1.txt

Ala Ala Gln Gln Ala Ala Ser Ser Ser Gly Gln Gly Gln Gln Ala Gln
305 310 315 320

Thr Pro Thr Gly Lys Gln Thr Asp Lys Ser Lys Ser Asn Met Lys Gly
325 330 335

Phe

<210> 99

<211> 332

<212> DNA

<213> Drosophila melanogaster

<400> 99

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gcaaagcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc	120
tcttcgctat tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta	180
acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgccaa gctctgctgc	240
tctaaacgac gcatttcgta ctccaaagta cgaatttttt ccctcaagct cttattttca	300
ttaaacaatg aacaggacct aacgccacag ta	332

<210> 100

<211> 1861

<212> DNA

<213> Drosophila melanogaster

<400> 100

gtaaatgttg tttaccaacg taacgcgtgt tttcgcttcg ttgtattttc ggtgtcgaat	60
attttgatg ctggccaaga gatagcgag cgatcggttc ggaactcttg ggcggactta	120
tcactgggtc ggtcaggggt cacgggttat cgttatcgct tatcagccag cggcggcgctc	180
atctcagcgc cggcgactct tctcactttg cggcagttcc gattcgaacg cagccgttta	240
caaagacatg cagcggggcg gctctacact gacacaaaag cttcggtttt gccttagtcg	300
ggacctgaac accaaagtgt gcaacccggt taacttcgag actggaaaagc ttagcggagc	360
tttaactcgc atcgccgcca aaaaacaacc atcaccaacg ccattcttac cggcgatcag	420
acgatattcg gactccaagc agagcacttt gaagaatatg gccgatcaga aactgctgca	480

Sequence listing as filed1.txt

aacccccgctg gcacagggcg atccggagct ggccgagctg atcaagaagg agaaggagcg	540
ccagcgcgaa ggactcgaga tgatcgccag tgagaacttc acctcgggtg cggttctcga	600
gagcctgagc tcctgcctga ccaacaagta ctccgagggga tatcccggca agaggtagta	660
cgggtggcaac gagtacatcg accgcataga gctgctcgcc cagcaacgcg gacgagct	720
gttcaacctg gacgatgaga agtggggcggt taatgtgcag ccttattccg gatccccggc	780
caatctggct gtctacacgg gcgtctgccg gccccacgat cgcatcatgg gcctggatct	840
gcccgatggc ggtcacttga cgcacgggtt cttcacgccc accaagaaga tatcgggcac	900
atcgatcttc ttcgagagca tgccgtacaa agtgaaccgg gagacgggca tcatcgatta	960
cgataagttg gcggaggcg cgaagaattt ccggccgcag atcatcattg ctggcatatc	1020
gtgctactcc cgtctgctgg actatgcgcyg tttccgacag atttgcgatg atgtgggcyg	1080
ctacctgatg gccgacatgg cccatgtggc gggcattgtg gccgcgggat tgataccatc	1140
gccgttcgaa tggggccgaca ttgtgaccac caccacgcac aagacactgc gaggtccgcy	1200
cgccggcgctg atcttcttcc gcaagggcggt gcgcagcacc aaggccaatg gagacaaggt	1260
actctacgat ctggaggagc gcatcaacca ggcgggtgtt ccatcactcc aggggtggctc	1320
gcacaacaac gccgtggctg gcattgccac cgccttcaag caggccaaga gtcccgaatt	1380
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gcgaggctat cagggtggcca ccggcggcac cgacgtccat ttggtgctgg tcgatgtgcy	1500
taaggctggc ctgaccggcg ccaaggccga gtacatctc gaggaggtgg gcatcgctg	1560
caacaagaac actgtgcccc gcgacaagtc cgccatgaat ccctccggca tccggctggg	1620
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catcgatgct gccctaaagg ttggcgctca ggcagccaag ctggccggca gtcccaagat	1740
aaccgattac cacaagacgc tggccgagaa tgtggagctc aaggcccagg tggacgagat	1800
ccgcaagaat gtggcccagt tcagcaggaa attcccgtg cccggcctgg agaccctgta	1860
g	1861

<210> 101

<211> 537

<212> PRT

<213> *Drosophila melanogaster*

<400> 101

Met Gln Arg Ala Arg Ser Thr Leu Thr Gln Lys Leu Arg Phe Cys Leu

Sequence listing as filed1.txt

1 5 10 15

Ser Arg Asp Leu Asn Thr Lys Val Gly Asn Pro Val Asn Phe Glu Thr
20 25 30

Gly Lys Leu Ser Gly Ala Leu Thr Arg Ile Ala Ala Lys Lys Gln Pro
35 40 45

Ser Pro Thr Pro Phe Leu Pro Ala Ile Arg Arg Tyr Ser Asp Ser Lys
50 55 60

Gln Ser Thr Leu Lys Asn Met Ala Asp Gln Lys Leu Leu Gln Thr Pro
65 70 75 80

Leu Ala Gln Gly Asp Pro Glu Leu Ala Glu Leu Ile Lys Lys Glu Lys
85 90 95

Glu Arg Gln Arg Glu Gly Leu Glu Met Ile Ala Ser Glu Asn Phe Thr
100 105 110

Ser Val Ala Val Leu Glu Ser Leu Ser Ser Cys Leu Thr Asn Lys Tyr
115 120 125

Ser Glu Gly Tyr Pro Gly Lys Arg Tyr Tyr Gly Gly Asn Glu Tyr Ile
130 135 140

Asp Arg Ile Glu Leu Leu Ala Gln Gln Arg Gly Arg Glu Leu Phe Asn
145 150 155 160

Leu Asp Asp Glu Lys Trp Gly Val Asn Val Gln Pro Tyr Ser Gly Ser
165 170 175

Pro Ala Asn Leu Ala Val Tyr Thr Gly Val Cys Arg Pro His Asp Arg
180 185 190

Ile Met Gly Leu Asp Leu Pro Asp Gly Gly His Leu Thr His Gly Phe
195 200 205

Phe Thr Pro Thr Lys Lys Ile Ser Ala Thr Ser Ile Phe Phe Glu Ser
210 215 220

Met Pro Tyr Lys Val Asn Pro Glu Thr Gly Ile Ile Asp Tyr Asp Lys
225 230 235 240

Leu Ala Glu Ala Ala Lys Asn Phe Arg Pro Gln Ile Ile Ile Ala Gly
245 250 255

Sequence listing as filed1.txt

Ile Ser Cys Tyr Ser Arg Leu Leu Asp Tyr Ala Arg Phe Arg Gln Ile
260 265 270

Cys Asp Asp Val Gly Ala Tyr Leu Met Ala Asp Met Ala His Val Ala
275 280 285

Gly Ile Val Ala Ala Gly Leu Ile Pro Ser Pro Phe Glu Trp Ala Asp
290 295 300

Ile Val Thr Thr Thr Thr His Lys Thr Leu Arg Gly Pro Arg Ala Gly
305 310 315 320

Val Ile Phe Phe Arg Lys Gly Val Arg Ser Thr Lys Ala Asn Gly Asp
325 330 335

Lys Val Leu Tyr Asp Leu Glu Glu Arg Ile Asn Gln Ala Val Phe Pro
340 345 350

Ser Leu Gln Gly Gly Pro His Asn Asn Ala Val Ala Gly Ile Ala Thr
355 360 365

Ala Phe Lys Gln Ala Lys Ser Pro Glu Phe Lys Ala Tyr Gln Thr Gln
370 375 380

Val Leu Lys Asn Ala Lys Ala Leu Cys Asp Gly Leu Ile Ser Arg Gly
385 390 395 400

Tyr Gln Val Ala Thr Gly Gly Thr Asp Val His Leu Val Leu Val Asp
405 410 415

Val Arg Lys Ala Gly Leu Thr Gly Ala Lys Ala Glu Tyr Ile Leu Glu
420 425 430

Glu Val Gly Ile Ala Cys Asn Lys Asn Thr Val Pro Gly Asp Lys Ser
435 440 445

Ala Met Asn Pro Ser Gly Ile Arg Leu Gly Thr Pro Ala Leu Thr Thr
450 455 460

Arg Gly Leu Ala Glu Gln Asp Ile Glu Gln Val Val Ala Phe Ile Asp
465 470 475 480

Ala Ala Leu Lys Val Gly Val Gln Ala Ala Lys Leu Ala Gly Ser Pro
485 490 495

Lys Ile Thr Asp Tyr His Lys Thr Leu Ala Glu Asn Val Glu Leu Lys
500 505 510

Sequence listing as filed1.txt

Ala Gln Val Asp Glu Ile Arg Lys Asn Val Ala Gln Phe Ser Arg Lys
515 520 525

Phe Pro Leu Pro Gly Leu Glu Thr Leu
530 535

<210> 102

<211> 1931

<212> DNA

<213> Homo sapiens

<400> 102

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cagcccagac tcagactggg gaagcaaaca ggggctggac aggccaggag agcctgtcgg      180
acagtgatcc tgagatgtgg gagttgctgc agagggagaa ggacaggcag tgtcgtggcc      240
tggagctcat tgcctcagag aacttctgca gccgagctgc gctggaggcc ctggggtcct      300
gtctgaacaa caagtactcg gagggttatc ctggcaagag atactatggg ggagcagagg      360
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tactcactgg tatcaggtgg tactgacaac cacctgggtc tgggtggacct gcggcccaag      1200
ggcctggatg gagctcgggc tgagcgggtg ctagagcttg tatccatcac tgccaacaag      1260
aacacctgtc ctggagaccg aagtgccatc acaccgggcg gcctgcggct tggggcccca      1320

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Sequence listing as filed1.txt

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gccttaactt ctcgacagtt ccgtgaggat gacttccgga gagttgtgga ctttatagat 1380
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gagcagtttg ccagggcctt ccccatgcct ggttttgatg agcattgaag gcacctggga 1560
aatgagggccc acagactcaa agttactctc cttcccccta cctggggccag tgaaatagaa 1620
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agagacgcgt cctcttttctt ggggaagtgt aggagtgtccc ttcagagcca gtagcaggca 1860
ggggtgggta ggcaccctcc ttcctgtttt tatctaataa aatgctaacc tgcaaaaaaa 1920
aaaaaaaaa a 1931
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<210> 103

<211> 474

<212> PRT

<213> Homo sapiens

<400> 103

Ala Ala Gln Thr Gln Thr Gly Glu Ala Asn Arg Gly Trp Thr Gly Gln
1 5 10 15

Glu Ser Leu Ser Asp Ser Asp Pro Glu Met Trp Glu Leu Leu Gln Arg
20 25 30

Glu Lys Asp Arg Gln Cys Arg Gly Leu Glu Leu Ile Ala Ser Glu Asn
35 40 45

Phe Cys Ser Arg Ala Ala Leu Glu Ala Leu Gly Ser Cys Leu Asn Asn
50 55 60

Lys Tyr Ser Glu Gly Tyr Pro Gly Lys Arg Tyr Tyr Gly Gly Ala Glu
65 70 75 80

Val Val Asp Glu Ile Glu Leu Leu Cys Gln Arg Arg Ala Leu Glu Ala
85 90 95

Phe Asp Leu Asp Pro Ala Gln Trp Gly Val Asn Val Gln Pro Tyr Ser
100 105 110

Sequence listing as filed1.txt

Gly Ser Pro Ala Asn Leu Ala Val Tyr Thr Ala Leu Leu Gln Pro His
115 120 125

Asp Arg Ile Met Gly Leu Asp Leu Pro Asp Gly Gly His Leu Thr His
130 135 140

Gly Tyr Met Ser Asp Val Lys Arg Ile Ser Ala Thr Ser Ile Phe Phe
145 150 155 160

Glu Ser Met Pro Tyr Lys Leu Asn Pro Lys Thr Gly Leu Ile Asp Tyr
165 170 175

Asn Gln Leu Ala Leu Thr Ala Arg Leu Phe Arg Pro Arg Leu Ile Ile
180 185 190

Ala Gly Thr Ser Ala Tyr Ala Arg Leu Ile Asp Tyr Ala Arg Met Arg
195 200 205

Glu Val Cys Asp Glu Val Lys Ala His Leu Leu Ala Asp Met Ala His
210 215 220

Ile Ser Gly Leu Val Ala Ala Lys Val Ile Pro Ser Pro Phe Lys His
225 230 235 240

Ala Asp Ile Val Thr Thr Thr Thr His Lys Thr Leu Arg Gly Ala Arg
245 250 255

Ser Gly Leu Ile Phe Tyr Arg Lys Gly Val Lys Ala Val Asp Pro Lys
260 265 270

Thr Gly Arg Glu Ile Leu Tyr Thr Phe Glu Asp Arg Ile Asn Phe Ala
275 280 285

Val Phe Pro Ser Leu Gln Gly Gly Pro His Asn His Ala Ile Ala Ala
290 295 300

Val Ala Val Ala Leu Lys Gln Ala Cys Thr Pro Met Phe Arg Glu Tyr
305 310 315 320

Ser Leu Gln Val Leu Lys Asn Ala Arg Ala Met Ala Asp Ala Leu Leu
325 330 335

Glu Arg Gly Tyr Ser Leu Val Ser Gly Gly Thr Asp Asn His Leu Val
340 345 350

Leu Val Asp Leu Arg Pro Lys Gly Leu Asp Gly Ala Arg Ala Glu Arg
355 360 365

Sequence listing as filed1.txt

Val Leu Glu Leu Val Ser Ile Thr Ala Asn Lys Asn Thr Cys Pro Gly
370 375 380

Asp Arg Ser Ala Ile Thr Pro Gly Gly Leu Arg Leu Gly Ala Pro Ala
385 390 395 400

Leu Thr Ser Arg Gln Phe Arg Glu Asp Asp Phe Arg Arg Val Val Asp
405 410 415

Phe Ile Asp Glu Gly Val Asn Ile Gly Leu Glu Val Lys Ser Lys Thr
420 425 430

Ala Lys Leu Gln Asp Phe Lys Ser Phe Leu Leu Lys Asp Ser Glu Thr
435 440 445

Ser Gln Arg Leu Ala Asn Leu Arg Gln Arg Val Glu Gln Phe Ala Arg
450 455 460

Ala Phe Pro Met Pro Gly Phe Asp Glu His
465 470

<210> 104

<211> 511

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222> 455, 463, 466, 477, 480, 481, 486, 487, 490, 493

<223> n is a or c or g or t

<220>

<221> misc_feature

<222> 496, 498, 504, 507

<223> n is a or c or g or t

<400> 104

gacaggagca gctcggaaacg gacaggaaaa gcaggagact aaacagtaag caataaattg 60

atttggcgta tagtagctta caccaaagta catatattgc cgcatatata gccagccggt 120

Sequence listing as filed1.txt

cacttgcgga tcagccaacg tcctgggccc caaggcgata gataccacga taaggagata	180
cagcgatacc accaatcatt agcaggcgac aacgacacat ccgcatccgc agaagatgtc	240
caacggcaag gcgacgggtct cgttcttcga gaccgggagc accaaacagt tcgagtactg	300
ctaccagctc tatccccagg ttcttaagct aaaggccgag aagcgcaact gttgggaagg	360
gcgatcgggtg cgggcctctt cgctattacg ccagctggcg aaagggggat gtgctgcaag	420
gcgattaagt tgggtaacgc cagggttttc ccagncacga cgntgnaaaa cgacggncan	480
ngccannctn tgntgntnta aacnacncat t	511

<210> 105

<211> 2280

<212> DNA

<213> Drosophila melanogaster

<400> 105

agatagaacg acaactcctg ttcccgggtc gtcgtcgttc gtcattccca tattcgcttc	60
tcgtattccc tcccattccc attcgcaatc ccaattccca attcccgtca cagagttag	120
cagcacatcg cacagctgca tcgctccgct ccgatccttt ttaatttttt gttgtgcctt	180
cgggtggcgtg ctcatcttca gaacagagta accccttttt atttgtcagt tgtcaacggc	240
gcccctgcag gcagaaagca gaaactgaaa cagcagagga agaagaagaa gcagcacagc	300
acgggcacag cacgaagcac gcagcacagc acaagcacag aggcgaaagc aagcaaagca	360
aagcagaggc aacacagaaa aacagcaaag cattggagta gttgtttgga tgtggacgga	420
aaggaagact ggcggcgact aactaaaagc agtacgttga caggagcagc tcggaacgga	480
caggaaaagc aggagactaa acaccagccg gtcacttgcg gatcagccaa cgtcctgggc	540
cccaaggcga tagataccac gataaggaga tacagcgata ccaccaatca ttagcaggcg	600
acaacgacac atccgcatcc gcagaagatg tccaacggca aggcgacggg ctcgttcttc	660
gagaccggga gcacaaaca gttcgagtac tgctaccagc tctatcccca ggttcttaag	720
ctaaaggccg agaagcgctg caagaagccg caagagctga tccgcctgga tcagtgggat	780
cagaatgaac tgcccaaatt gattaaggca cgcggcaagg acgcgcatat ggtatacgat	840
gagctcgtcc agtcgatgaa gtggaagcag tcgcgcggca aattctatcc gcagctatcc	900
tacctggtca aggtcaacac accgcgcgcc gtcattccagg agacaaagaa ggccttcgcg	960
aagctgcccc atctggagca ggcgatcaca gctttatcga acctcaaggg cgttggcacc	1020
acaatggcca gtgcactgct ggcagccgca gctcccatt cggcaccatt catggccgac	1080
gagtgccctga tggccatacc agagatcgag ggcattcgatt acaccaccaa ggagtacctc	1140

Sequence listing as filed1.txt

aacttcgtca atcacattca ggccaccgtg gagcgcctca atgcggaggt gggcggggat 1200
 acgccgcact ggtcgctca tcgctggag ctggccctct ggtcacacta tgtggccaat 1260
 gatctcagtc ccgagatgct cgacgatatg ccgccgcctg gatccggcgc ctccactggc 1320
 accggttcac tcagcacaaa cggcaacagc agcaaggtgc tcgatggcga cgataccaac 1380
 gatggtgtgg gtgttgattt ggacgacgaa agccaaggag caggcggtcg caaactgct 1440
 acagaatcgg agacagagaa tgagaacacc aaccggctg ctctgacgcc tctacagtcg 1500
 ggcgaggcca agaacaacgc agctgccgtt ggcgccgcc tgcaggacgg tgactccaac 1560
 tttgtttcga acgattccac ctcccaggag ccgatcatcg atgacaacga tggcaccaca 1620
 cagacaacgg ccaccacttc cacagaggac ggtgagccca tcgccctaga cattggcatt 1680
 ggcacgggtt cgagtggaac accgctcgcc tcggactctg aaagcaatca ggaggcgccg 1740
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 caaaagcagt cgccgagcca gccccacaaa actaacaatt cgatcaccaa caacggtcag 1860
 cctgctcctt tggcagaaga ggaagcgggt acagcagcac cacagccagc cagcaaagcg 1920
 actgcagcac cagccaatgg aaatggtaac ggaacggcg tcctgggcga cgaggatgag 1980
 gatgaggcgg aggacgagga ggaagatgag ctggacgagg aggaggataa tgaggcggag 2040
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 ctggcggcga acaaggcgggt ggatgcgggt tcaccggtag cagcgggtgc agactcggca 2160
 ccagccattg gacagaagcg tactgccctg cactgcgata tggagctgaa gaacgccggc 2220
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<210> 106

<211> 550

<212> PRT

<213> Drosophila melanogaster

<400> 106

Met Ser Asn Gly Lys Ala Thr Val Ser Phe Phe Glu Thr Gly Ser Thr
 1 5 10 15

Lys Gln Phe Glu Tyr Cys Tyr Gln Leu Tyr Pro Gln Val Leu Lys Leu
 20 25 30

Lys Ala Glu Lys Arg Cys Lys Lys Pro Gln Glu Leu Ile Arg Leu Asp
 35 40 45

Sequence listing as filed1.txt

Gln Trp Tyr Gln Asn Glu Leu Pro Lys Leu Ile Lys Ala Arg Gly Lys
50 55 60

Asp Ala His Met Val Tyr Asp Glu Leu Val Gln Ser Met Lys Trp Lys
65 70 75 80

Gln Ser Arg Gly Lys Phe Tyr Pro Gln Leu Ser Tyr Leu Val Lys Val
85 90 95

Asn Thr Pro Arg Ala Val Ile Gln Glu Thr Lys Lys Ala Phe Arg Lys
100 105 110

Leu Pro Asn Leu Glu Gln Ala Ile Thr Ala Leu Ser Asn Leu Lys Gly
115 120 125

Val Gly Thr Thr Met Ala Ser Ala Leu Leu Ala Ala Ala Ala Pro Asp
130 135 140

Ser Ala Pro Phe Met Ala Asp Glu Cys Leu Met Ala Ile Pro Glu Ile
145 150 155 160

Glu Gly Ile Asp Tyr Thr Thr Lys Glu Tyr Leu Asn Phe Val Asn His
165 170 175

Ile Gln Ala Thr Val Glu Arg Leu Asn Ala Glu Val Gly Gly Asp Thr
180 185 190

Pro His Trp Ser Pro His Arg Val Glu Leu Ala Leu Trp Ser His Tyr
195 200 205

Val Ala Asn Asp Leu Ser Pro Glu Met Leu Asp Asp Met Pro Pro Pro
210 215 220

Gly Ser Gly Ala Ser Thr Gly Thr Gly Ser Leu Ser Thr Asn Gly Asn
225 230 235 240

Ser Ser Lys Val Leu Asp Gly Asp Asp Thr Asn Asp Gly Val Gly Val
245 250 255

Asp Leu Asp Asp Glu Ser Gln Gly Ala Gly Gly Arg Asn Thr Ala Thr
260 265 270

Glu Ser Glu Thr Glu Asn Glu Asn Thr Asn Pro Ala Ala Leu Thr Pro
275 280 285

Leu Gln Ser Gly Glu Ala Lys Asn Asn Ala Ala Ala Val Gly Ala Ala
290 295 300

Sequence listing as filed1.txt

Leu Gln Asp Gly Asp Ser Asn Phe Val Ser Asn Asp Ser Thr Ser Gln
 305 310 315 320
 Glu Pro Ile Ile Asp Asp Asn Asp Gly Thr Thr Gln Thr Thr Ala Thr
 325 330 335
 Thr Ser Thr Glu Asp Gly Glu Pro Ile Ala Leu Asp Ile Gly Ile Gly
 340 345 350
 Ile Gly Ser Ser Gly Thr Pro Leu Ala Ser Asp Ser Glu Ser Asn Gln
 355 360 365
 Glu Ala Pro Pro Lys Thr Asn Ser Leu Pro Ile Leu Thr Pro Thr Gln
 370 375 380
 His Ser Ser Gln Asn Gln Asn Gln Lys Gln Ser Pro Ser Gln Pro His
 385 390 395 400
 Lys Thr Asn Asn Ser Ile Thr Asn Asn Gly Gln Pro Ala Pro Leu Ala
 405 410 415
 Glu Glu Glu Ala Val Thr Ala Ala Pro Gln Pro Ala Ser Lys Ala Thr
 420 425 430
 Ala Ala Pro Ala Asn Gly Asn Gly Asn Gly Asn Gly Val Leu Gly Asp
 435 440 445
 Glu Asp Glu Asp Glu Ala Glu Asp Glu Glu Glu Asp Glu Leu Asp Glu
 450 455 460
 Glu Glu Asp Asn Glu Ala Glu Leu Glu Ala Asp Glu Ser Asn Ser Ser
 465 470 475 480
 Asn Gly Ile Val Arg Asp Ser Lys Leu Gln Gln Leu Ala Ala Asn Lys
 485 490 495
 Ala Val Asp Ala Val Ser Pro Val Ala Ala Gly Ala Asp Ser Ala Pro
 500 505 510
 Ala Ile Gly Gln Lys Arg Thr Ala Leu His Cys Asp Met Glu Leu Lys
 515 520 525
 Asn Ala Gly Gly Val Gly Val Gly Val Gly Glu Lys Ser Pro Asp Leu
 530 535 540
 Lys Lys Leu Arg Ser Glu

Sequence listing as filed1.txt

545

550

<210> 107

<211> 2023

<212> DNA

<213> *Drosophila melanogaster*

<400> 107

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agtgagcgat tatcggattg agtaaataca acaaacaaca gagacacggc cgcagcagca    180
gcagcattaa cacagtacgt tgacaggagc agctcggaac ggacaggaaa agcaggagac    240
taaacaccag ccggtcactt gcggatcagc caacgtcctg ggccccaagg cgatagatac    300
cacgataagg agatacagcg ataccaccaa tcattagcag gcgacaacga cacatccgca    360
tccgcagaag atgtccaacg gcaaggcgac ggtctcgttc ttcgagaccg ggagcaccaa    420
acagttcgag tactgctacc agctctatcc ccaggttctt aagctaaagg ccgagaagcg    480
ctgcaagaag ccgcaagagc tgatccgcct ggatcagtgg tatcagaatg aactgcccaa    540
attgattaag gcacgcggca aggacgcgca tatggtatac gatgagctcg tccagtcgat    600
gaagtggaag cagtcgcgcg gcaaattcta tccgcagcta tcctacctgg tcaagggtcaa    660
cacaccgcgc gccgtcatcc aggagacaaa gaaggccttc cgcaagctgc ccaatctgga    720
gcaggcgatc acagctttat cgaacctcaa gggcggttggc accacaatgg ccagtgcact    780
gctggcagcc gcagctcccc attcggcacc attcatggcc gacgagtgcc tgatggccat    840
accagagatc gagggcatcg attacaccac caaggagtag ctcaacttcg tcaatcacat    900
tcaggccacc gtggagcgcc tcaatgcgga ggtgggcggg gatacgccgc actggtcgcc    960
tcatcgctg gagctggccc tctggtcaca ctatgtggcc aatgatctca gtcccagat    1020
gctcgacgat atgccgccgc ctggatccgg cgcctccact ggaccgggtt cactcagcac    1080
aaacggcaac agcagcaagg tgctcgatgg cgacgatacc aacgatgggtg tgggtgttga    1140
tttgacgac gaaagccaag gagcaggcgg tcgcaacact gctacagaat cggagacaga    1200
gaatgagaac accaaccgga ctgctctgac gcctctacag tcgggcgagg ccaagaacaa    1260
cgcagctgcc gttggcgccg ccctgcagga cggtgactcc aactttgttt cgaacgattc    1320
cacctcccag gagccgatca tcgatgacaa cgatggcacc acacagacaa cggccaccac    1380
ttccacagag gacggtgagc ccatcgccct agacattggc attggcatcg gttcagtggt    1440
aacaccgctc gcctcggact ctgaaagcaa tcaggaggcg ccgccaaga ccaacagcct    1500

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Sequence listing as filed1.txt

gccccatcctg actcccacac agcactcgag ccagaatcag aatcaaaagc agtcgccgag 1560
ccagccccac aaaactaaca attcgatcac caacaacggt cagcctgctc ctttggcaga 1620
agaggaagcg gttacagcag caccacagcc agccagcaaa gcgactgcag caccagccaa 1680
tggaatggt aacgggaacg gcgtcctggg cgacgaggat gaggatgagg cggaggacga 1740
ggaggaagat gagctggacg aggaggagga taatgaggcg gagctagagg ctgacgagag 1800
caatagcagc aacggcattg tgagggacag taaactgcag cagctggcgg cgaacaaggc 1860
ggtggatgcg gtttcaccgg tagcagcggg tgacagactc gcaccagcca ttggacagaa 1920
gcgtactgcc ctgactgcg atatggagct gaagaacgcc ggcggagtgg gtgtgggcgt 1980
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<210> 108

<211> 550

<212> PRT

<213> Drosophila melanogaster

<400> 108

Met Ser Asn Gly Lys Ala Thr Val Ser Phe Phe Glu Thr Gly Ser Thr
1 5 10 15

Lys Gln Phe Glu Tyr Cys Tyr Gln Leu Tyr Pro Gln Val Leu Lys Leu
20 25 30

Lys Ala Glu Lys Arg Cys Lys Lys Pro Gln Glu Leu Ile Arg Leu Asp
35 40 45

Gln Trp Tyr Gln Asn Glu Leu Pro Lys Leu Ile Lys Ala Arg Gly Lys
50 55 60

Asp Ala His Met Val Tyr Asp Glu Leu Val Gln Ser Met Lys Trp Lys
65 70 75 80

Gln Ser Arg Gly Lys Phe Tyr Pro Gln Leu Ser Tyr Leu Val Lys Val
85 90 95

Asn Thr Pro Arg Ala Val Ile Gln Glu Thr Lys Lys Ala Phe Arg Lys
100 105 110

Leu Pro Asn Leu Glu Gln Ala Ile Thr Ala Leu Ser Asn Leu Lys Gly
115 120 125

Sequence listing as filed1.txt

Val Gly Thr Thr Met Ala Ser Ala Leu Leu Ala Ala Ala Ala Pro Asp
130 135 140

Ser Ala Pro Phe Met Ala Asp Glu Cys Leu Met Ala Ile Pro Glu Ile
145 150 155 160

Glu Gly Ile Asp Tyr Thr Thr Lys Glu Tyr Leu Asn Phe Val Asn His
165 170 175

Ile Gln Ala Thr Val Glu Arg Leu Asn Ala Glu Val Gly Gly Asp Thr
180 185 190

Pro His Trp Ser Pro His Arg Val Glu Leu Ala Leu Trp Ser His Tyr
195 200 205

Val Ala Asn Asp Leu Ser Pro Glu Met Leu Asp Asp Met Pro Pro Pro
210 215 220

Gly Ser Gly Ala Ser Thr Gly Thr Gly Ser Leu Ser Thr Asn Gly Asn
225 230 235 240

Ser Ser Lys Val Leu Asp Gly Asp Asp Thr Asn Asp Gly Val Gly Val
245 250 255

Asp Leu Asp Asp Glu Ser Gln Gly Ala Gly Gly Arg Asn Thr Ala Thr
260 265 270

Glu Ser Glu Thr Glu Asn Glu Asn Thr Asn Pro Ala Ala Leu Thr Pro
275 280 285

Leu Gln Ser Gly Glu Ala Lys Asn Asn Ala Ala Ala Val Gly Ala Ala
290 295 300

Leu Gln Asp Gly Asp Ser Asn Phe Val Ser Asn Asp Ser Thr Ser Gln
305 310 315 320

Glu Pro Ile Ile Asp Asp Asn Asp Gly Thr Thr Gln Thr Thr Ala Thr
325 330 335

Thr Ser Thr Glu Asp Gly Glu Pro Ile Ala Leu Asp Ile Gly Ile Gly
340 345 350

Ile Gly Ser Ser Gly Thr Pro Leu Ala Ser Asp Ser Glu Ser Asn Gln
355 360 365

Glu Ala Pro Pro Lys Thr Asn Ser Leu Pro Ile Leu Thr Pro Thr Gln
370 375 380

Sequence listing as filed1.txt

His Ser Ser Gln Asn Gln Asn Gln Lys Gln Ser Pro Ser Gln Pro His
 385 390 395 400

Lys Thr Asn Asn Ser Ile Thr Asn Asn Gly Gln Pro Ala Pro Leu Ala
 405 410 415

Glu Glu Glu Ala Val Thr Ala Ala Pro Gln Pro Ala Ser Lys Ala Thr
 420 425 430

Ala Ala Pro Ala Asn Gly Asn Gly Asn Gly Asn Gly Val Leu Gly Asp
 435 440 445

Glu Asp Glu Asp Glu Ala Glu Asp Glu Glu Glu Asp Glu Leu Asp Glu
 450 455 460

Glu Glu Asp Asn Glu Ala Glu Leu Glu Ala Asp Glu Ser Asn Ser Ser
 465 470 475 480

Asn Gly Ile Val Arg Asp Ser Lys Leu Gln Gln Leu Ala Ala Asn Lys
 485 490 495

Ala Val Asp Ala Val Ser Pro Val Ala Ala Gly Ala Asp Ser Ala Pro
 500 505 510

Ala Ile Gly Gln Lys Arg Thr Ala Leu His Cys Asp Met Glu Leu Lys
 515 520 525

Asn Ala Gly Gly Val Gly Val Gly Val Gly Glu Lys Ser Pro Asp Leu
 530 535 540

Lys Lys Leu Arg Ser Glu
 545 550

<210> 109

<211> 740

<212> DNA

<213> Drosophila melanogaster

<220>

<221> misc_feature

<222>

3, 8, 11, 40, 41, 48, 49, 66, 70, 76, 78, 81, 96, 100

<223> n is a or g or c or t

Sequence listing as filed1.txt

<220>

<221> misc_feature

<222>

106, 114, 120, 121, 124, 154, 176, 178, 179, 185

<223> n is a or g or c or t

<220>

<221> misc_feature

<222>

186, 192, 197, 215, 218, 235..237, 251, 256, 268

<223> n is a or g or c or t

<220>

<221> misc_feature

<222>

287, 294, 307, 309, 310, 313, 314, 320, 321, 329

<223> n is a or g or c or t

<220>

<221> misc_feature

<222>

333..335, 337, 339, 344, 346, 350, 359, 369, 370, 372

<223> n is a or g or c or t

<220>

<221> misc_feature

<222>

374, 375, 382, 422, 442..445, 453, 461..464, 473, 475..481

<223> n is a or g or c or t

<220>

<221> misc_feature

<222>

486, 491, 492, 494, 506, 518, 540, 545, 568, 569, 574

<223> n is a or g or c or t

<220>

<221> misc_feature

<222>

575, 597, 609, 610, 618, 623, 629, 632, 640, 644, 645

<223> n is a or g or c or t

<220>

<221> misc_feature

<222>

650, 660, 663, 664, 667, 682, 687, 688, 693..695

Sequence listing as filed1.txt

<223> n is a or g or c or t

<220>

<221> misc_feature

<222>

703, 704, 719, 725, 727, 733, 734

<223> n is a or g or c or t

<400> 109
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gaaganctgn gctaangnaa naggcatctc gatgantttt ataataagg caantgggtan 120
naanggttta tgccaaaagta ttacacacca gggntgggca caacagatct taactnanna 180
taggnnattg gnataancct aaatttgtaa gattntgnaa taatatagta gagannntca 240
atacgatta ntaatngtga cgatcccnag cataaactca aaaaaancct atanttttat 300
aaaggcnann ccnnactaan naattaaaang aannncngnc gccncnaaan gatgattgng 360
ctatataann anannattga tngaggcact tatattatta taattaaaac acttaattat 420
tntgtgtgaa atgattgcac tnnnnattgg gcnagagcct nnnncgtatt ganannnnnn 480
natttnggct nnancgtgaa atatcntaca aactcgtnat tgctaaataa cttttgtatn 540
ccccnctggt cactctgact taaacgtntt tcgnnaaaac agcggctgat cactgangtt 600
ttctccggnn ttctgctntc aanccgaant anaaacaggn gaanntcccn gataatttgn 660
ggntanccc actgatcaca gngcccnngg atnnncaagg aanngcgatc gaaacccgnc 720
ctggngnaac acnntttccc 740

<210> 110

<211> 664

<212> DNA

<213> Drosophila melanogaster

<400> 110
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aacagcccaa aatgtccttc gttaagaacg cccgtttgct ggccgcccgc ggcgctcgct 120
tggtccagaa ccgcagctac tcggatgaga tgaagctgac cttcgccgcc gccaacaaaa 180
ccttctacga tgccgctgtg gtgcgcaaaa tcgatgtgcc ttccttctcg ggatccttcg 240
gcatcctggc caagcacgtg ccactctgg ctgtcctgaa gcccggcgtt gtccaggtgg 300
tggaacacga tggcaagacc ctcaagttct tcgtctccag cggttccgct accgtcaacg 360

Sequence listing as filed1.txt

aggattcctc cgttcaggtt ctggccgagg aggcccacaa catcgaggac atcgatgcca 420
atgaggcgcg ccagctgctc gcgaaataacc agtcacagct tagctccgct ggcgacgaca 480
aggccaaggc ccaggctgcc attgccgtgg aggtcgccga agcgttagtc aaggctgccg 540
aatagacgta atcaccacac aaccgccacc aataaaccac aatcgatgct ttgtgtctga 600
aataaataaa aaacataacg atcaccttaa aaagccagag agttatgaaa caataaaaaa 660
gcga 664

<210> 111

<211> 157

<212> PRT

<213> Drosophila melanogaster

<400> 111

Met Ser Phe Val Lys Asn Ala Arg Leu Leu Ala Ala Arg Gly Ala Arg
1 5 10 15

Leu Ala Gln Asn Arg Ser Tyr Ser Asp Glu Met Lys Leu Thr Phe Ala
20 25 30

Ala Ala Asn Lys Thr Phe Tyr Asp Ala Ala Val Val Arg Gln Ile Asp
35 40 45

Val Pro Ser Phe Ser Gly Ser Phe Gly Ile Leu Ala Lys His Val Pro
50 55 60

Thr Leu Ala Val Leu Lys Pro Gly Val Val Gln Val Val Glu Asn Asp
65 70 75 80

Gly Lys Thr Leu Lys Phe Phe Val Ser Ser Gly Ser Val Thr Val Asn
85 90 95

Glu Asp Ser Ser Val Gln Val Leu Ala Glu Glu Ala His Asn Ile Glu
100 105 110

Asp Ile Asp Ala Asn Glu Ala Arg Gln Leu Leu Ala Lys Tyr Gln Ser
115 120 125

Gln Leu Ser Ser Ala Gly Asp Asp Lys Ala Lys Ala Gln Ala Ala Ile
130 135 140

Ala Val Glu Val Ala Glu Ala Leu Val Lys Ala Ala Glu
145 150 155

Sequence listing as filed1.txt

<210> 112

<211> 994

<212> DNA

<213> Homo sapiens

<400> 112

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gccgcctcgt ccgccacgcc cgtgcctatg ccgaggccgc cgccgccccg gctgccgcct      180
ctggcccca aa ccagatgtcc ttcaccttcg cctctccac gcaggtgttc ttcaacggtg      240
ccaacgtccg gcaggtggac gtgcccacgc tgaccggagc cttcggcatc ctggcgcccc      300
acgtgcccac gctgcaggtc ctgcggccgg ggctggtcgt ggtgcatgca gaggacggca      360
ccacctcaa atactttgtg agcagcggtt ccatcgagc gaacgccgac tcttcggtgc      420
agttgttggc cgaagaggcc gtgacgctgg acatgttgga cctgggggca gccaaggcaa      480
acttgagaaa ggcccaggcg gagctggtgg ggacagctga cgaggccacg cgggcagaga      540
tccagatccg aatcgaggcc aacgagggcc tgggtgaaggc cctggagtag gcggtgcgta      600
cccggtgtcc cgaggcccg ccaggggctg ggccaggatg ccaggtgggc ccagccagct      660
cctgggggtcc cggccacctg gggaagccgc gcctgccaag gaggccacca gagggcagtg      720
caggcttctg cctgggcccc aggccctgcc tgtgttgaaa gctctgggga ctgggcccagg      780
gaagctctc ctcagctttg agctgtggct gccacccatg gggctctcct tccgcctctc      840
aagatcccc cagcctgacg ggccgcttac catccccctt gccctgcaga gccagccgcc      900
aagggtgacc tcagcttcgg agccacctct ggatgaactg ccccagccc ccgccccatt      960
aaagaccggg aagcctgaaa aaaaaaaaaa aaaa      994
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<210> 113

<211> 168

<212> PRT

<213> Homo sapiens

<400> 113

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Met Leu Pro Ala Ala Leu Leu Arg Arg Pro Gly Leu Gly Arg Leu Val
1          5          10          15
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Sequence listing as filed1.txt

Arg His Ala Arg Ala Tyr Ala Glu Ala Ala Ala Ala Pro Ala Ala Ala
20 25 30

Ser Gly Pro Asn Gln Met Ser Phe Thr Phe Ala Ser Pro Thr Gln Val
35 40 45

Phe Phe Asn Gly Ala Asn Val Arg Gln Val Asp Val Pro Thr Leu Thr
50 55 60

Gly Ala Phe Gly Ile Leu Ala Ala His Val Pro Thr Leu Gln Val Leu
65 70 75 80

Arg Pro Gly Leu Val Val Val His Ala Glu Asp Gly Thr Thr Ser Lys
85 90 95

Tyr Phe Val Ser Ser Gly Ser Ile Ala Val Asn Ala Asp Ser Ser Val
100 105 110

Gln Leu Leu Ala Glu Glu Ala Val Thr Leu Asp Met Leu Asp Leu Gly
115 120 125

Ala Ala Lys Ala Asn Leu Glu Lys Ala Gln Ala Glu Leu Val Gly Thr
130 135 140

Ala Asp Glu Ala Thr Arg Ala Glu Ile Gln Ile Arg Ile Glu Ala Asn
145 150 155 160

Glu Ala Leu Val Lys Ala Leu Glu
165

<210> 114

<211> 4010

<212> DNA

<213> Drosophila melanogaster

<400> 114

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caacagcagg cgcaacaaca gcagcagcaa caacagcaac agcagcagca acagtcgtcg	180
acgtcacagg ccaattctac aggccagaca tcttttctctg cccacatggtt tggcaatatg	240
aatcagtcga gttcgtccta gatgagagcg actgcaaaaa aatcggaata aacacggtta	300
taatataataa gtacaaataa accatatata tgtgtttatg ttatgtatat atacataaag	360

Sequence listing as filed1.txt

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Sequence listing as filed1.txt

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cctccaaagt ggacgtatgg agtgtgggtg ttatcttcta ccagtgtctg tacggcaaaa	3900
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Sequence listing as filed1.txt

<211> 1168

<212> PRT

<213> Drosophila melanogaster

<400> 115

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20 25 30

His Pro His Gln Gln Gln Gln Leu Gln Pro Pro Gln Gln Gln Gln
35 40 45

His Phe Pro Asn His His Ser Ala Gln Gln Gln Ser Gln Gln Gln Gln
50 55 60

Gln Gln Glu Gln Gln Asn Pro Gln Gln Gln Ala Gln Gln Gln Gln Gln
65 70 75 80

Ile Leu Pro His Gln His Leu Gln His Leu His Lys His Pro His Gln
85 90 95

Leu Gln Leu His Gln Gln Gln Gln Gln Gln Leu His Gln Gln Gln Gln
100 105 110

Gln His Phe His Gln Gln Ser Leu Gln Gly Leu His Gln Gly Ser Ser
115 120 125

Asn Pro Asp Ser Asn Met Ser Thr Gly Ser Ser His Ser Glu Lys Asp
130 135 140

Val Asn Asp Met Leu Ser Gly Gly Ala Ala Thr Pro Gly Ala Ala Ala
145 150 155 160

Ala Ala Ile Gln Gln Gln His Pro Ala Phe Ala Pro Thr Leu Gly Met
165 170 175

Gln Gln Pro Pro Pro Pro Pro Gln His Ser Asn Asn Gly Gly Glu
180 185 190

Met Gly Tyr Leu Ser Ala Gly Thr Thr Thr Thr Thr Ser Val Leu Thr
195 200 205

Val Gly Lys Pro Arg Thr Pro Ala Glu Arg Lys Arg Lys Arg Lys Met
Page 92

Sequence listing as filed1.txt

210

215

220

Pro Pro Cys Ala Thr Ser Ala Asp Glu Ala Gly Ser Gly Gly Gly Ser
225 230 235 240

Gly Gly Ala Gly Ala Thr Val Val Asn Asn Ser Ser Leu Lys Gly Lys
245 250 255

Ser Leu Ala Phe Arg Asp Met Pro Lys Val Asn Met Ser Leu Asn Leu
260 265 270

Gly Asp Arg Leu Gly Gly Ser Ala Gly Ser Gly Val Gly Ala Gly Gly
275 280 285

Ala Gly Ser Gly Gly Gly Gly Ala Gly Ser Gly Ser Gly Ser Gly Gly
290 295 300

Gly Lys Ser Ala Arg Leu Met Leu Pro Val Ser Asp Asn Lys Lys Ile
305 310 315 320

Asn Asp Tyr Phe Asn Lys Gln Gln Thr Gly Val Gly Val Gly Val Pro
325 330 335

Gly Gly Ala Gly Gly Asn Thr Ala Gly Leu Arg Gly Ser His Thr Gly
340 345 350

Gly Gly Ser Lys Ser Pro Ser Ser Ala Gln Gln Gln Gln Thr Ala Ala
355 360 365

Gln Gln Gln Gly Ser Gly Val Ala Thr Gly Gly Ser Ala Gly Gly Ser
370 375 380

Ala Gly Asn Gln Val Gln Val Gln Thr Ser Ser Ala Tyr Ala Leu Tyr
385 390 395 400

Pro Pro Ala Ser Pro Gln Thr Gln Thr Ser Gln Gln Gln Gln Gln Gln
405 410 415

Gln Pro Gly Ser Asp Phe His Tyr Val Asn Ser Ser Lys Ala Gln Gln
420 425 430

Gln Gln Gln Arg Gln Gln Gln Gln Thr Ser Asn Gln Met Val Pro Pro
435 440 445

His Val Val Val Gly Leu Gly Gly His Pro Leu Ser Leu Ala Ser Ile
450 455 460

Sequence listing as filed1.txt

Gln Gln Gln Thr Pro Leu Ser Gln Gln Gln Gln Gln Gln Gln
465 470 475 480

Gln Gln Gln Gln Gln Leu Gly Pro Pro Thr Thr Ser Thr Ala Ser Val
485 490 495

Val Pro Thr His Pro His Gln Leu Gly Ser Leu Gly Val Val Gly Met
500 505 510

Val Gly Val Gly Val Gly Val Gly Val Gly Val Asn Val Gly Val Gly
515 520 525

Pro Pro Leu Pro Pro Pro Pro Pro Met Ala Met Pro Ala Ala Ile Ile
530 535 540

Thr Tyr Ser Lys Ala Thr Gln Thr Glu Val Ser Leu His Glu Leu Gln
545 550 555 560

Glu Arg Glu Ala Glu His Glu Ser Gly Lys Val Lys Leu Asp Glu Met
565 570 575

Thr Arg Leu Ser Asp Glu Gln Lys Ser Gln Ile Val Gly Asn Gln Lys
580 585 590

Thr Ile Asp Gln His Lys Cys His Ile Ala Lys Cys Ile Asp Val Val
595 600 605

Lys Lys Leu Leu Lys Glu Lys Ser Ser Ile Glu Lys Lys Glu Ala Arg
610 615 620

Gln Lys Cys Met Gln Asn Arg Leu Arg Leu Gly Gln Phe Val Thr Gln
625 630 635 640

Arg Val Gly Ala Thr Phe Gln Glu Asn Trp Thr Asp Gly Tyr Ala Phe
645 650 655

Gln Glu Leu Ser Arg Arg Gln Glu Glu Ile Thr Ala Glu Arg Glu Glu
660 665 670

Ile Asp Arg Gln Lys Lys Gln Leu Met Lys Lys Arg Pro Ala Glu Ser
675 680 685

Gly Arg Lys Arg Asn Asn Asn Ser Asn Gln Asn Asn Gln Gln Gln Gln
690 695 700

Gln Gln Gln His Gln Gln Gln Gln Gln Gln Asn Ser Asn Ser Asn
705 710 715 720

Sequence listing as filed1.txt

Asp Ser Thr Gln Leu Thr Ser Gly Val Val Thr Gly Pro Gly Ser Asp
725 730 735

Arg Val Ser Val Ser Val Asp Ser Gly Leu Gly Gly Asn Asn Ala Gly
740 745 750

Ala Ile Gly Gly Gly Thr Val Gly Gly Gly Val Gly Gly Gly Gly Val
755 760 765

Gly Gly Gly Gly Val Gly Gly Gly Gly Gly Arg Gly Leu Ser Arg Ser
770 775 780

Asn Ser Thr Gln Ala Asn Gln Ala Gln Leu Leu His Asn Gly Gly Gly
785 790 795 800

Gly Ser Gly Gly Asn Val Gly Asn Ser Gly Gly Val Gly Asp Arg Leu
805 810 815

Ser Asp Arg Gly Gly Gly Gly Gly Gly Ile Gly Gly Asn Asp Ser Gly
820 825 830

Ser Cys Ser Asp Ser Gly Thr Phe Leu Lys Pro Asp Pro Val Ser Gly
835 840 845

Ala Tyr Thr Ala Gln Glu Tyr Tyr Glu Tyr Asp Glu Ile Leu Lys Leu
850 855 860

Arg Gln Asn Ala Leu Lys Lys Glu Asp Ala Asp Leu Gln Leu Glu Met
865 870 875 880

Glu Lys Leu Glu Arg Glu Arg Asn Leu His Ile Arg Glu Leu Lys Arg
885 890 895

Ile Leu Asn Glu Asp Gln Ser Arg Phe Asn Asn His Pro Val Leu Asn
900 905 910

Asp Arg Tyr Leu Leu Leu Met Leu Leu Gly Lys Gly Gly Phe Ser Glu
915 920 925

Val His Lys Ala Phe Asp Leu Lys Glu Gln Arg Tyr Val Ala Cys Lys
930 935 940

Val His Gln Leu Asn Lys Asp Trp Lys Glu Asp Lys Lys Ala Asn Tyr
945 950 955 960

Ile Lys His Ala Leu Arg Glu Tyr Asn Ile His Lys Ala Leu Asp His
965 970 975

Sequence listing as filed1.txt

Pro Arg Val Val Lys Leu Tyr Asp Val Phe Glu Ile Asp Ala Asn Ser
980 985 990

Phe Cys Thr Val Leu Glu Tyr Cys Asp Gly His Asp Leu Asp Phe Tyr
995 1000 1005

Leu Lys Gln His Lys Thr Ile Pro Glu Arg Glu Ala Arg Ser Ile
1010 1015 1020

Ile Met Gln Val Val Ser Ala Leu Lys Tyr Leu Asn Glu Ile Lys
1025 1030 1035

Pro Pro Val Ile His Tyr Asp Leu Lys Pro Gly Asn Ile Leu Leu
1040 1045 1050

Thr Glu Gly Asn Val Cys Gly Glu Ile Lys Ile Thr Asp Phe Gly
1055 1060 1065

Leu Ser Lys Val Met Asp Asp Glu Asn Tyr Asn Pro Asp His Gly
1070 1075 1080

Met Asp Leu Thr Ser Gln Gly Ala Gly Thr Tyr Trp Tyr Leu Pro
1085 1090 1095

Pro Glu Cys Phe Val Val Gly Lys Asn Pro Pro Lys Ile Ser Ser
1100 1105 1110

Lys Val Asp Val Trp Ser Val Gly Val Ile Phe Tyr Gln Cys Leu
1115 1120 1125

Tyr Gly Lys Lys Pro Phe Gly His Asn Gln Ser Gln Ala Thr Ile
1130 1135 1140

Leu Glu Glu Asn Thr Ile Leu Lys Ala Thr Glu Val Gln Phe Ser
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Asn Lys Pro Thr Val Ser Asn Glu Ala Lys
1160 1165

<210> 116

<211> 4108

<212> DNA

<213> Drosophila melanogaster

Sequence listing as filed1.txt

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Sequence listing as filed1.txt

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Sequence listing as filed1.txt

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caagccaacc gtttctaacg aggccaag	4108

<210> 117

<211> 1156

<212> PRT

<213> Drosophila melanogaster

<400> 117

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			20					25					30		

Gln	Gln	Gln	Gln	His	Phe	Pro	Asn	His	His	Ser	Ala	Gln	Gln	Gln	Ser
		35					40					45			

Gln	Gln	Gln	Gln	Gln	Gln	Gln	Glu	Gln	Gln	Asn	Pro	Gln	Gln	Gln	Ala	Gln
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Gln	Gln	Gln	Gln	Ile	Leu	Pro	His	Gln	His	Leu	Gln	His	Leu	His	Lys	
65					70					75					80	

His	Pro	His	Gln	Leu	Gln	Leu	His	Gln	Gln	Gln	Gln	Gln	Gln	Leu	His
			85					90						95	

Gln	Gln	Gln	Gln	Gln	His	Phe	His	Gln	Gln	Ser	Leu	Gln	Gly	Leu	His
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Gln	Gly	Ser	Ser	Asn	Pro	Asp	Ser	Asn	Met	Ser	Thr	Gly	Ser	Ser	His
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Ser	Glu	Lys	Asp	Val	Asn	Asp	Met	Leu	Ser	Gly	Gly	Ala	Ala	Thr	Pro
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Sequence listing as filed1.txt

Gly Ala Ala Ala Ala Ala Ile Gln Gln Gln His Pro Ala Phe Ala Pro
145 150 155 160

Thr Leu Gly Met Gln Gln Pro Pro Pro Pro Pro Gln His Ser Asn
165 170 175

Asn Gly Gly Glu Met Gly Tyr Leu Ser Ala Gly Thr Thr Thr Thr Thr
180 185 190

Ser Val Leu Thr Val Gly Lys Pro Arg Thr Pro Ala Glu Arg Lys Arg
195 200 205

Lys Arg Lys Met Pro Pro Cys Ala Thr Ser Ala Asp Glu Ala Gly Ser
210 215 220

Gly Gly Gly Ser Gly Gly Ala Gly Ala Thr Val Val Asn Asn Ser Ser
225 230 235 240

Leu Lys Gly Lys Ser Leu Ala Phe Arg Asp Met Pro Lys Val Asn Met
245 250 255

Ser Leu Asn Leu Gly Asp Arg Leu Gly Gly Ser Ala Gly Ser Gly Val
260 265 270

Gly Ala Gly Gly Ala Gly Ser Gly Gly Gly Gly Ala Gly Ser Gly Ser
275 280 285

Gly Ser Gly Gly Gly Lys Ser Ala Arg Leu Met Leu Pro Val Ser Asp
290 295 300

Asn Lys Lys Ile Asn Asp Tyr Phe Asn Lys Gln Gln Thr Gly Val Gly
305 310 315 320

Val Gly Val Pro Gly Gly Ala Gly Gly Asn Thr Ala Gly Leu Arg Gly
325 330 335

Ser His Thr Gly Gly Gly Ser Lys Ser Pro Ser Ser Ala Gln Gln Gln
340 345 350

Gln Thr Ala Ala Gln Gln Gln Gly Ser Gly Val Ala Thr Gly Gly Ser
355 360 365

Ala Gly Gly Ser Ala Gly Asn Gln Val Gln Val Gln Thr Ser Ser Ala
370 375 380

Tyr Ala Leu Tyr Pro Pro Ala Ser Pro Gln Thr Gln Thr Ser Gln Gln
385 390 395 400

Sequence listing as filed1.txt

Gln Gln Gln Gln Gln Pro Gly Ser Asp Phe His Tyr Val Asn Ser Ser
405 410 415

Lys Ala Gln Gln Gln Gln Arg Gln Gln Gln Thr Ser Asn Gln
420 425 430

Met Val Pro Pro His Val Val Val Gly Leu Gly Gly His Pro Leu Ser
435 440 445

Leu Ala Ser Ile Gln Gln Gln Thr Pro Leu Ser Gln Gln Gln Gln Gln
450 455 460

Gln Gln Gln Gln Gln Gln Gln Gln Gln Leu Gly Pro Pro Thr Thr Ser
465 470 475 480

Thr Ala Ser Val Val Pro Thr His Pro His Gln Leu Gly Ser Leu Gly
485 490 495

Val Val Gly Met Val Gly Val Gly Val Gly Val Gly Val Gly Val Asn
500 505 510

Val Gly Val Gly Pro Pro Leu Pro Pro Pro Pro Pro Met Ala Met Pro
515 520 525

Ala Ala Ile Ile Thr Tyr Ser Lys Ala Thr Gln Thr Glu Val Ser Leu
530 535 540

His Glu Leu Gln Glu Arg Glu Ala Glu His Glu Ser Gly Lys Val Lys
545 550 555 560

Leu Asp Glu Met Thr Arg Leu Ser Asp Glu Gln Lys Ser Gln Ile Val
565 570 575

Gly Asn Gln Lys Thr Ile Asp Gln His Lys Cys His Ile Ala Lys Cys
580 585 590

Ile Asp Val Val Lys Lys Leu Leu Lys Glu Lys Ser Ser Ile Glu Lys
595 600 605

Lys Glu Ala Arg Gln Lys Cys Met Gln Asn Arg Leu Arg Leu Gly Gln
610 615 620

Phe Val Thr Gln Arg Val Gly Ala Thr Phe Gln Glu Asn Trp Thr Asp
625 630 635 640

Gly Tyr Ala Phe Gln Glu Leu Ser Arg Arg Gln Glu Glu Ile Thr Ala
645 650 655

Sequence listing as filed1.txt

Glu Arg Glu Glu Ile Asp Arg Gln Lys Lys Gln Leu Met Lys Lys Arg
660 665 670

Pro Ala Glu Ser Gly Arg Lys Arg Asn Asn Asn Ser Asn Gln Asn Asn
675 680 685

Gln Gln Gln Gln Gln Gln Gln His Gln Gln Gln Gln Gln Gln Asn
690 695 700

Ser Asn Ser Asn Asp Ser Thr Gln Leu Thr Ser Gly Val Val Thr Gly
705 710 715 720

Pro Gly Ser Asp Arg Val Ser Val Ser Val Asp Ser Gly Leu Gly Gly
725 730 735

Asn Asn Ala Gly Ala Ile Gly Gly Gly Thr Val Gly Gly Gly Val Gly
740 745 750

Gly Gly Gly Val Gly Gly Gly Gly Val Gly Gly Gly Gly Gly Arg Gly
755 760 765

Leu Ser Arg Ser Asn Ser Thr Gln Ala Asn Gln Ala Gln Leu Leu His
770 775 780

Asn Gly Gly Gly Gly Ser Gly Gly Asn Val Gly Asn Ser Gly Gly Val
785 790 795 800

Gly Asp Arg Leu Ser Asp Arg Gly Gly Gly Gly Gly Gly Ile Gly Gly
805 810 815

Asn Asp Ser Gly Ser Cys Ser Asp Ser Gly Thr Phe Leu Lys Pro Asp
820 825 830

Pro Val Ser Gly Ala Tyr Thr Ala Gln Glu Tyr Tyr Glu Tyr Asp Glu
835 840 845

Ile Leu Lys Leu Arg Gln Asn Ala Leu Lys Lys Glu Asp Ala Asp Leu
850 855 860

Gln Leu Glu Met Glu Lys Leu Glu Arg Glu Arg Asn Leu His Ile Arg
865 870 875 880

Glu Leu Lys Arg Ile Leu Asn Glu Asp Gln Ser Arg Phe Asn Asn His
885 890 895

Pro Val Leu Asn Asp Arg Tyr Leu Leu Leu Met Leu Leu Gly Lys Gly

Sequence listing as filed1.txt

900

905

910

Gly Phe Ser Glu Val His Lys Ala Phe Asp Leu Lys Glu Gln Arg Tyr
915 920 925

Val Ala Cys Lys Val His Gln Leu Asn Lys Asp Trp Lys Glu Asp Lys
930 935 940

Lys Ala Asn Tyr Ile Lys His Ala Leu Arg Glu Tyr Asn Ile His Lys
945 950 955 960

Ala Leu Asp His Pro Arg Val Val Lys Leu Tyr Asp Val Phe Glu Ile
965 970 975

Asp Ala Asn Ser Phe Cys Thr Val Leu Glu Tyr Cys Asp Gly His Asp
980 985 990

Leu Asp Phe Tyr Leu Lys Gln His Lys Thr Ile Pro Glu Arg Glu Ala
995 1000 1005

Arg Ser Ile Ile Met Gln Val Val Ser Ala Leu Lys Tyr Leu Asn
1010 1015 1020

Glu Ile Lys Pro Pro Val Ile His Tyr Asp Leu Lys Pro Gly Asn
1025 1030 1035

Ile Leu Leu Thr Glu Gly Asn Val Cys Gly Glu Ile Lys Ile Thr
1040 1045 1050

Asp Phe Gly Leu Ser Lys Val Met Asp Asp Glu Asn Tyr Asn Pro
1055 1060 1065

Asp His Gly Met Asp Leu Thr Ser Gln Gly Ala Gly Thr Tyr Trp
1070 1075 1080

Tyr Leu Pro Pro Glu Cys Phe Val Val Gly Lys Asn Pro Pro Lys
1085 1090 1095

Ile Ser Ser Lys Val Asp Val Trp Ser Val Gly Val Ile Phe Tyr
1100 1105 1110

Gln Cys Leu Tyr Gly Lys Lys Pro Phe Gly His Asn Gln Ser Gln
1115 1120 1125

Ala Thr Ile Leu Glu Glu Asn Thr Ile Leu Lys Ala Thr Glu Val
1130 1135 1140

Sequence listing as filed1.txt

Gln Phe Ser Asn Lys Pro Thr Val Ser Asn Glu Ala Lys
1145 1150 1155

<210> 118

<211> 3327

<212> DNA

<213> Homo sapiens

<400> 118

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Sequence listing as filed1.txt

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Sequence listing as filed1.txt

<210> 119

<211> 749

<212> PRT

<213> Homo sapiens

<400> 119

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Ser Ser Asn Gln Ser Leu Cys Ser Val Gly Ser Leu Ser Asp Lys Glu
35 40 45

Val Glu Thr Pro Glu Lys Lys Gln Asn Asp Gln Arg Asn Arg Lys Arg
50 55 60

Lys Ala Glu Pro Tyr Glu Thr Ser Gln Gly Lys Gly Thr Pro Arg Gly
65 70 75 80

His Lys Ile Ser Asp Tyr Phe Glu Phe Ala Gly Gly Ser Ala Pro Gly
85 90 95

Thr Ser Pro Gly Arg Ser Val Pro Pro Val Ala Arg Ser Ser Pro Gln
100 105 110

His Ser Leu Ser Asn Pro Leu Pro Arg Arg Val Glu Gln Pro Leu Tyr
115 120 125

Gly Leu Asp Gly Ser Ala Ala Lys Glu Ala Thr Glu Glu Gln Ser Ala
130 135 140

Leu Pro Thr Leu Met Ser Val Met Leu Ala Lys Pro Arg Leu Asp Thr
145 150 155 160

Glu Gln Leu Ala Gln Arg Gly Ala Gly Leu Cys Phe Thr Phe Val Ser
165 170 175

Ala Gln Gln Asn Ser Pro Ser Ser Thr Gly Ser Gly Asn Thr Glu His
180 185 190

Ser Cys Ser Ser Gln Lys Gln Ile Ser Ile Gln His Arg Arg Thr Gln
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Sequence listing as filed1.txt

195

200

205

Ser Asp Leu Thr Ile Glu Lys Ile Ser Ala Leu Glu Asn Ser Lys Asn
210 215 220

Ser Asp Leu Glu Lys Lys Glu Gly Arg Ile Asp Asp Leu Leu Arg Ala
225 230 235 240

Asn Cys Asp Leu Arg Arg Gln Ile Asp Glu Gln Gln Lys Met Leu Glu
245 250 255

Lys Tyr Lys Glu Arg Leu Asn Arg Cys Val Thr Met Ser Lys Lys Leu
260 265 270

Leu Ile Glu Lys Ser Lys Gln Glu Lys Met Ala Cys Arg Asp Lys Ser
275 280 285

Met Gln Asp Arg Leu Arg Leu Gly His Phe Thr Thr Val Arg His Gly
290 295 300

Ala Ser Phe Thr Glu Gln Trp Thr Asp Gly Tyr Ala Phe Gln Asn Leu
305 310 315 320

Ile Lys Gln Gln Glu Arg Ile Asn Ser Gln Arg Glu Glu Ile Glu Arg
325 330 335

Gln Arg Lys Met Leu Ala Lys Arg Lys Pro Pro Ala Met Gly Gln Ala
340 345 350

Pro Pro Ala Thr Asn Glu Gln Lys Gln Arg Lys Ser Lys Thr Asn Gly
355 360 365

Ala Glu Asn Glu Thr Leu Thr Leu Ala Glu Tyr His Glu Gln Glu Glu
370 375 380

Ile Phe Lys Leu Arg Leu Gly His Leu Lys Lys Glu Glu Ala Glu Ile
385 390 395 400

Gln Ala Glu Leu Glu Arg Leu Glu Arg Val Arg Asn Leu His Ile Arg
405 410 415

Glu Leu Lys Arg Ile His Asn Glu Asp Asn Ser Gln Phe Lys Asp His
420 425 430

Pro Thr Leu Asn Asp Arg Tyr Leu Leu Leu His Leu Leu Gly Arg Gly
435 440 445

Sequence listing as filed1.txt

Gly Phe Ser Glu Val Tyr Lys Ala Phe Asp Leu Thr Glu Gln Arg Tyr
450 455 460

Val Ala Val Lys Ile His Gln Leu Asn Lys Asn Trp Arg Asp Glu Lys
465 470 475 480

Lys Glu Asn Tyr His Lys His Ala Cys Arg Glu Tyr Arg Ile His Lys
485 490 495

Glu Leu Asp His Pro Arg Ile Val Lys Leu Tyr Asp Tyr Phe Ser Leu
500 505 510

Asp Thr Asp Ser Phe Cys Thr Val Leu Glu Tyr Cys Glu Gly Asn Asp
515 520 525

Leu Asp Phe Tyr Leu Lys Gln His Lys Leu Met Ser Glu Lys Glu Ala
530 535 540

Arg Ser Ile Ile Met Gln Ile Val Asn Ala Leu Lys Tyr Leu Asn Glu
545 550 555 560

Ile Lys Pro Pro Ile Ile His Tyr Asp Leu Lys Pro Gly Asn Ile Leu
565 570 575

Leu Val Asn Gly Thr Ala Cys Gly Glu Ile Lys Ile Thr Asp Phe Gly
580 585 590

Leu Ser Lys Ile Met Asp Asp Asp Ser Tyr Asn Ser Val Asp Gly Met
595 600 605

Glu Leu Thr Ser Gln Gly Ala Gly Thr Tyr Trp Tyr Leu Pro Pro Glu
610 615 620

Cys Phe Val Val Gly Lys Glu Pro Pro Lys Ile Ser Asn Lys Val Asp
625 630 635 640

Val Trp Ser Val Gly Val Ile Phe Tyr Gln Cys Leu Tyr Gly Arg Lys
645 650 655

Pro Phe Gly His Asn Gln Ser Gln Gln Asp Ile Leu Gln Glu Asn Thr
660 665 670

Ile Leu Lys Ala Thr Glu Val Gln Phe Pro Pro Lys Pro Val Val Thr
675 680 685

Pro Glu Ala Lys Ala Phe Ile Arg Arg Cys Leu Ala Tyr Arg Lys Arg
690 695 700

Sequence listing as filed1.txt

Asp Arg Ile Asp Val Gln Gln Leu Ala Cys Asp Pro Tyr Leu Leu Pro
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His Ile Arg Lys Ser Val Ser Thr Ser Ser Pro Ala Gly Ala Ala Ile
725 730 735

Ala Ser Thr Ser Gly Ala Ser Asn Asn Ser Ser Ser Asn
740 745

<210> 120

<211> 1509

<212> DNA

<213> Drosophila melanogaster

<400> 120

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tagaaaagga gagcgtagg cgatagtaga gaaagggcaa atgataaatt aaatgtgtga    1140
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Sequence listing as filed1.txt

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<210> 121

<211> 302

<212> PRT

<213> Drosophila melanogaster

<400> 121

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Cys Gly Asp Ile His Gly Gln Tyr Thr Asp Leu Leu Arg Leu Phe Glu
 35 40 45

Tyr Gly Gly Phe Pro Pro Ala Ala Asn Tyr Leu Phe Leu Gly Asp Tyr
 50 55 60

Val Asp Arg Gly Lys Gln Ser Leu Glu Thr Ile Cys Leu Leu Leu Ala
 65 70 75 80

Tyr Lys Ile Lys Tyr Pro Glu Asn Phe Phe Leu Leu Arg Gly Asn His
 85 90 95

Glu Cys Ala Ser Ile Asn Arg Ile Tyr Gly Phe Tyr Asp Glu Cys Lys
 100 105 110

Arg Arg Tyr Asn Val Lys Leu Trp Lys Thr Phe Thr Asp Cys Phe Asn
 115 120 125

Cys Leu Pro Val Ala Ala Ile Ile Asp Glu Lys Ile Phe Cys Cys His
 130 135 140

Gly Gly Leu Ser Pro Asp Leu Gln Gly Met Glu Gln Ile Arg Arg Leu
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Sequence listing as filed1.txt

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Met Arg Pro Thr Asp Val Pro Asp Thr Gly Leu Leu Cys Asp Leu Leu
165 170 175

Trp Ser Asp Pro Asp Lys Asp Val Gln Gly Trp Gly Glu Asn Asp Arg
180 185 190

Gly Val Ser Phe Thr Phe Gly Val Asp Val Val Ser Lys Phe Leu Asn
195 200 205

Arg His Glu Leu Asp Leu Ile Cys Arg Ala His Gln Val Val Glu Asp
210 215 220

Gly Tyr Glu Phe Phe Ala Arg Arg Gln Leu Val Thr Leu Phe Ser Ala
225 230 235 240

Pro Asn Tyr Cys Gly Glu Phe Asp Asn Ala Gly Gly Met Met Thr Val
245 250 255

Asp Asp Thr Leu Met Cys Ser Phe Gln Ile Leu Lys Pro Ser Glu Lys
260 265 270

Lys Ala Lys Tyr Leu Tyr Ser Gly Met Asn Ser Ser Arg Pro Thr Thr
275 280 285

Pro Gln Arg Ser Ala Pro Met Leu Ala Thr Asn Lys Lys Lys
290 295 300

<210> 122

<211> 3590

<212> DNA

<213> Homo sapiens

<400> 122

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Sequence listing as filed1.txt

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Sequence listing as filed1.txt

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aattaatatt	ggtcattaaa	tttaa	aggat	ggaaatttat	catgtttaaa	3480
gcactcttaa	aaccacttaa	acagcctcca	gtcataaaaa	tgtgttcttt	acaaatattt	3540
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<210> 123

<211> 327

<212> PRT

<213> Homo sapiens

<400> 123

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Glu	Val	Arg	Gly	Cys	Arg	Pro	Gly	Lys	Ile	Val	Gln	Met	Thr	Glu	Ala
			20					25					30		

Sequence listing as filed1.txt

Glu Val Arg Gly Leu Cys Ile Lys Ser Arg Glu Ile Phe Leu Ser Gln
35 40 45

Pro Ile Leu Leu Glu Leu Glu Ala Pro Leu Lys Ile Cys Gly Asp Ile
50 55 60

His Gly Gln Tyr Thr Asp Leu Leu Arg Leu Phe Glu Tyr Gly Gly Phe
65 70 75 80

Pro Pro Glu Ala Asn Tyr Leu Phe Leu Gly Asp Tyr Val Asp Arg Gly
85 90 95

Lys Gln Ser Leu Glu Thr Ile Cys Leu Leu Leu Ala Tyr Lys Ile Lys
100 105 110

Tyr Pro Glu Asn Phe Phe Leu Leu Arg Gly Asn His Glu Cys Ala Ser
115 120 125

Ile Asn Arg Ile Tyr Gly Phe Tyr Asp Glu Cys Lys Arg Arg Phe Asn
130 135 140

Ile Lys Leu Trp Lys Thr Phe Thr Asp Cys Phe Asn Cys Leu Pro Ile
145 150 155 160

Ala Ala Ile Val Asp Glu Lys Ile Phe Cys Cys His Gly Gly Leu Ser
165 170 175

Pro Asp Leu Gln Ser Met Glu Gln Ile Arg Arg Ile Met Arg Pro Thr
180 185 190

Asp Val Pro Asp Thr Gly Leu Leu Cys Asp Leu Leu Trp Ser Asp Pro
195 200 205

Asp Lys Asp Val Gln Gly Trp Gly Glu Asn Asp Arg Gly Val Ser Phe
210 215 220

Thr Phe Gly Ala Asp Val Val Ser Lys Phe Leu Asn Arg His Asp Leu
225 230 235 240

Asp Leu Ile Cys Arg Ala His Gln Val Val Glu Asp Gly Tyr Glu Phe
245 250 255

Phe Ala Lys Arg Gln Leu Val Thr Leu Phe Ser Ala Pro Asn Tyr Cys
260 265 270

Gly Glu Phe Asp Asn Ala Gly Gly Met Met Ser Val Asp Glu Thr Leu

Sequence listing as filed1.txt

275

280

285

Met Cys Ser Phe Gln Ile Leu Lys Pro Ser Glu Lys Lys Ala Lys Tyr
290 295 300

Gln Tyr Gly Gly Leu Asn Ser Gly Arg Pro Val Thr Pro Pro Arg Thr
305 310 315 320

Ala Asn Pro Pro Lys Lys Arg
325

<210> 124

<211> 1365

<212> DNA

<213> Drosophila melanogaster

<400> 124

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aaagtcggtg aagaagtcgc acgttgatcg ttgtgttttt tttccgaaat tttctgcaaa      180
aagcccgtgc gtgcgtgagt ttctctggct cttgcttttt ttttgtccat gcgtgtgtgt      240
gtggtcgcac aaattttaccg atattttcgcc tgtgagagcg aaacgaacga aaaacgaaag      300
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aagccagccg ccacaatgag caaatcactc tttgatcttc cgttgaccat tgaaccagaa      600
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Sequence listing as filed1.txt

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ccctatgccc cagtcctggc tgagaagcag attccggtct ttacattgc agttgccatt 1320
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<210> 125

<211> 269

<212> PRT

<213> Drosophila melanogaster

<400> 125

Met Ser Lys Ser Leu Phe Asp Leu Pro Leu Thr Ile Glu Pro Glu His
1 5 10 15

Glu Leu Arg Phe Val Gly Pro Phe Thr Arg Pro Val Val Thr Ile Met
20 25 30

Thr Leu Arg Asn Asn Ser Ala Leu Pro Leu Val Phe Lys Ile Lys Thr
35 40 45

Thr Ala Pro Lys Arg Tyr Cys Val Arg Pro Asn Ile Gly Lys Ile Ile
50 55 60

Pro Phe Arg Ser Thr Gln Val Glu Ile Cys Leu Gln Pro Phe Val Tyr
65 70 75 80

Asp Gln Gln Glu Lys Asn Lys His Lys Phe Met Val Gln Ser Val Leu
85 90 95

Ala Pro Met Asp Ala Asp Leu Ser Asp Leu Asn Lys Leu Trp Lys Asp
100 105 110

Leu Glu Pro Glu Gln Leu Met Asp Ala Lys Leu Lys Cys Val Phe Glu
115 120 125

Met Pro Thr Ala Glu Ala Asn Ala Glu Asn Thr Ser Gly Gly Gly Ala
130 135 140

Val Gly Gly Gly Thr Gly Ala Ala Gly Gly Gly Ser Ala Gly Ala Asn
145 150 155 160

Thr Ser Ser Ala Ser Ala Glu Ala Leu Glu Ser Lys Pro Lys Leu Ser
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Sequence listing as filed1.txt

165 170 175

Ser Glu Asp Lys Phe Lys Pro Ser Asn Leu Leu Glu Thr Ser Glu Ser
180 185 190

Leu Asp Leu Leu Ser Gly Glu Ile Lys Ala Leu Arg Glu Cys Asn Ile
195 200 205

Glu Leu Arg Arg Glu Asn Leu His Leu Lys Asp Gln Ile Thr Arg Phe
210 215 220

Arg Ser Ser Pro Ala Val Lys Gln Val Asn Glu Pro Tyr Ala Pro Val
225 230 235 240

Leu Ala Glu Lys Gln Ile Pro Val Phe Tyr Ile Ala Val Ala Ile Ala
245 250 255

Ala Ala Ile Val Ser Leu Leu Leu Gly Lys Phe Phe Leu
260 265

<210> 126

<211> 2195

<212> DNA

<213> Homo sapiens

<400> 126

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ccgcagcacg agctcaaatt ccgaggctccc ttcaccgatg ttgtcaccac caacctaaag	240
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gaatgtaaga ggctgcaagg tgaagttcag aggctacggg aggagaacaa gcagttcaag	720
gaagaagatg gactgcggat gaggaagaca gtgcagagca acagcccat ttcagcatta	780

Sequence listing as filed1.txt

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aaaagaaaaa ttataataaa gccccaaaat taaga	2195

<210> 127

<211> 243

<212> PRT

<213> Homo sapiens

<400> 127

Met Ala Lys Val Glu Gln Val Leu Ser Leu Glu Pro Gln His Glu Leu

Sequence listing as filed1.txt

1 5 10 15

Lys Phe Arg Gly Pro Phe Thr Asp Val Val Thr Thr Asn Leu Lys Leu
 20 25 30

Gly Asn Pro Thr Asp Arg Asn Val Cys Phe Lys Val Lys Thr Thr Ala
 35 40 45

Pro Arg Arg Tyr Cys Val Arg Pro Asn Ser Gly Ile Ile Asp Ala Gly
 50 55 60

Ala Ser Ile Asn Val Ser Val Met Leu Gln Pro Phe Asp Tyr Asp Pro
 65 70 75 80

Asn Glu Lys Ser Lys His Lys Phe Met Val Gln Ser Met Phe Ala Pro
 85 90 95

Thr Asp Thr Ser Asp Met Glu Ala Val Trp Lys Glu Ala Lys Pro Glu
 100 105 110

Asp Leu Met Asp Ser Lys Leu Arg Cys Val Phe Glu Leu Pro Ala Glu
 115 120 125

Asn Asp Lys Pro His Asp Val Glu Ile Asn Lys Ile Ile Ser Thr Thr
 130 135 140

Ala Ser Lys Thr Glu Thr Pro Ile Val Ser Lys Ser Leu Ser Ser Ser
 145 150 155 160

Leu Asp Asp Thr Glu Val Lys Lys Val Met Glu Glu Cys Lys Arg Leu
 165 170 175

Gln Gly Glu Val Gln Arg Leu Arg Glu Glu Asn Lys Gln Phe Lys Glu
 180 185 190

Glu Asp Gly Leu Arg Met Arg Lys Thr Val Gln Ser Asn Ser Pro Ile
 195 200 205

Ser Ala Leu Ala Pro Thr Gly Lys Glu Glu Gly Leu Ser Thr Arg Leu
 210 215 220

Leu Ala Leu Val Val Leu Phe Phe Ile Val Gly Val Ile Ile Gly Lys
 225 230 235 240

Ile Ala Leu

Sequence listing as filed1.txt

<210> 128

<211> 609

<212> DNA

<213> Drosophila melanogaster

<400> 128

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gagatgcagc aggatgccgt cgattgtgcg acacaggccc tcgagaagta caacattgaa	300
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tgcatgtgcg gtcgcaactt tggatcgat gtcacacacg agacgcgcca ctttatttac	420
ttctatttgg gccagggtggc tattttactg ttttaagagcg gttaaagtat tgtcgagtcg	480
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cagcaggggc agcagtcgca tttcggagca tcagaggatg aggatctaga gcagaaacag	600
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<210> 129

<211> 89

<212> PRT

<213> Drosophila melanogaster

<400> 129

Met Ser Asp Arg Lys Ala Val Ile Lys Asn Ala Asp Met Ser Glu Glu	
1 5 10 15	
Met Gln Gln Asp Ala Val Asp Cys Ala Thr Gln Ala Leu Glu Lys Tyr	
20 25 30	
Asn Ile Glu Lys Asp Ile Ala Ala Tyr Ile Lys Lys Glu Phe Asp Lys	
35 40 45	
Lys Tyr Asn Pro Thr Trp His Cys Ile Val Gly Arg Asn Phe Gly Ser	
50 55 60	
Tyr Val Thr His Glu Thr Arg His Phe Ile Tyr Phe Tyr Leu Gly Gln	

Sequence listing as filed1.txt

65

70

75

80

Val Ala Ile Leu Leu Phe Lys Ser Gly
85

<210> 130

<211> 735

<212> DNA

<213> Homo sapiens

<400> 130

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tgccgggagcc ggagaccgcg gcggcgggcg ctgctgcagc tgcaggagga gcccagggaa	180
caccgcccct gcctgtgctc tgcctcgggc catcgctcct ccccagggcc cagtgcggac	240
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ttgcactgga gccagcatca ggatgtcctc tccaatggct gtgctactgc atggactgta	660
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aaaaaaaaaa aaaaaa	735

<210> 131

<211> 89

<212> PRT

<213> Homo sapiens

<400> 131

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Met Gln Gln Asp Ala Val Asp Cys Ala Thr Gln Ala Met Glu Lys Tyr	
20 25 30	

Sequence listing as filed1.txt

Asn Ile Glu Lys Asp Ile Ala Ala Tyr Ile Lys Lys Glu Phe Asp Lys
35 40 45

Lys Tyr Asn Pro Thr Trp His Cys Ile Val Gly Arg Asn Phe Gly Ser
50 55 60

Tyr Val Thr His Glu Thr Lys His Phe Ile Tyr Phe Tyr Leu Gly Gln
65 70 75 80

Val Ala Ile Leu Leu Phe Lys Ser Gly
85

<210> 132

<211> 4901

<212> DNA

<213> Drosophila melanogaster

<400> 132

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ccattcccga cctggcggtc accgagatgg aagcatatgc cgaggatata gtcgtcgata	960
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Sequence listing as filed1.txt

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gtgattctgg gatcgttttg gggtaccaga acaagggcga acgcaactgg cgtgctcgtc	1680
cactgaccac ggaccacaag ccggagtcac tggcagagaa gacgagaatc cagcgttccg	1740
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Sequence listing as filed1.txt

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gttcggggaca gcacgaattt gcttaccag tgaccaccgc cacagccagc gagtgggtgtg	3240
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cggtcgaaaa acctccatcc aagcaggaaa agaagctgcc gaagaagcaa gagaccaaac	3480
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cgccccgaat ccgacgctat cgcaacgtgc ccaacgagaa ccatcagcac atgcagacgc	3720
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gcagtgccag cggcagtggg ctggtgggca ctggtgggtc gccctcgaat gtgaaatcaa	4440
atcgcctgca ggcctgcaat ggagccatct ctgcgcgtcc gccgccctcg ccgaagaaac	4500
tgaatgcagc cgtgcccaca ttggcaattg gaacgcgtgc atatacggcg gcgttggcgg	4560
cggcgggcga tcacctgaac aagcgggtgt cgttgccgag cagcagtggc aactctggca	4620
atctgataac cgccatcagt tgctacagt acaggagcag ggcggcgact gcggcgggat	4680
caccgggatc tggaggcggg gcagcgggac caccaggagc atctttggcc gcatccacag	4740
tcggcacgcg aaggcgctag gctagattgt aacgaaacat gcgagcaact tgcaagtaca	4800

Sequence listing as filed1.txt

aatcctaagc aacggaaaat tttagatcct agtatactac tttactgaaa acgcaaaatt 4860
gcataattta accaattttt ttatgtgcac aacacacaca c 4901

<210> 133

<211> 1400

<212> PRT

<213> Drosophila melanogaster

<400> 133

Met Leu Pro Ala Asn Asn Arg Ser Ser Thr Ser Thr His Thr Asn Thr
1 5 10 15

Asn Ala Asn Thr Ile Asn Ala Thr Thr Asn Thr Thr Asn Arg Cys Leu
20 25 30

Ile Asn Thr Ala Ile Glu Lys Thr Val Val Arg Leu Arg Glu Thr Ala
35 40 45

Ala Asn Ser Ala Pro Ala Pro Ala Thr Ala Ser Val Thr Arg His Gly
50 55 60

Gly Ser Ser Ser Gly Asn Asn Asn Asn Asn Ser Ala Cys His Pro Ala
65 70 75 80

Leu Asp Ala Ser Ser Asp Val Val Val Val Glu Pro Ala Ala Val Gly
85 90 95

Val Ala Gln Glu Glu Glu Glu Pro Glu Gln Arg Pro Glu Arg Ile
100 105 110

Ser Ile Pro Ile Pro Asp Leu Ala Phe Thr Glu Met Glu Ala Tyr Ala
115 120 125

Glu Asp Ile Val Val Asp Met Glu Gly Gly Ser Pro Ala Lys Pro Leu
130 135 140

Asn Pro Lys Lys Gln Arg Leu Asn Ser Ala Thr Thr Thr Thr Ile Asn
145 150 155 160

Arg Ser Arg Gly Gly Gly Ala Ala Gln Ser Arg Leu Arg Arg Ser Ala
165 170 175

Ala Ile Val Pro Pro Arg Ser Ile Pro Glu Ser Cys Ala Ser Ser Ser
180 185 190

Sequence listing as filed1.txt

Asn Ser Asn Ser Ser Ser Ser Ser Asn Ser Asn Ser Ser Ser Ser Ser
 195 200 205
 Ala Thr Gly Ser Ser Ala Ser Thr Gly Asn Pro Ser Pro Cys Ser Ser
 210 215 220
 Leu Gly Val Asn Met Arg Val Thr Gly Gln Cys Cys Gln Gly Gly Arg
 225 230 235 240
 Lys Tyr Met Glu Asp Gln Phe Ser Val Ala Tyr Gln Glu Ser Pro Ile
 245 250 255
 Thr His Glu Leu Glu Tyr Ala Phe Phe Gly Ile Tyr Asp Gly His Gly
 260 265 270
 Gly Pro Glu Ala Ala Leu Phe Ala Lys Glu His Leu Met Leu Glu Ile
 275 280 285
 Val Lys Gln Lys Gln Phe Trp Ser Asp Gln Asp Glu Asp Val Leu Arg
 290 295 300
 Ala Ile Arg Glu Gly Tyr Ile Ala Thr His Phe Ala Met Trp Arg Glu
 305 310 315 320
 Gln Glu Lys Trp Pro Arg Thr Ala Asn Gly His Leu Ser Thr Ala Gly
 325 330 335
 Thr Thr Ala Thr Val Ala Phe Met Arg Arg Glu Lys Ile Tyr Ile Gly
 340 345 350
 His Val Gly Asp Ser Gly Ile Val Leu Gly Tyr Gln Asn Lys Gly Glu
 355 360 365
 Arg Asn Trp Arg Ala Arg Pro Leu Thr Thr Asp His Lys Pro Glu Ser
 370 375 380
 Leu Ala Glu Lys Thr Arg Ile Gln Arg Ser Gly Gly Asn Val Ala Ile
 385 390 395 400
 Lys Ser Gly Val Pro Arg Val Val Trp Asn Arg Pro Arg Asp Pro Met
 405 410 415
 His Arg Gly Pro Ile Arg Arg Arg Thr Leu Val Asp Glu Ile Pro Phe
 420 425 430
 Leu Ala Val Ala Arg Ser Leu Gly Asp Leu Trp Ser Tyr Asn Ser Arg

Sequence listing as filed1.txt

435

440

445

Phe Lys Glu Phe Val Val Ser Pro Asp Pro Asp Val Lys Val Val Lys
450 455 460

Ile Asn Pro Ser Thr Phe Arg Cys Leu Ile Phe Gly Thr Asp Gly Leu
465 470 475 480

Trp Asn Val Val Thr Ala Gln Glu Ala Val Asp Ser Val Arg Lys Glu
485 490 495

His Leu Ile Gly Glu Ile Leu Asn Glu Gln Asp Val Met Asn Pro Ser
500 505 510

Lys Ala Leu Val Asp Gln Ala Leu Lys Thr Trp Ala Ala Lys Lys Met
515 520 525

Arg Ala Asp Asn Thr Ser Val Val Thr Val Ile Leu Thr Pro Ala Ala
530 535 540

Arg Asn Asn Ser Pro Thr Thr Pro Thr Arg Ser Pro Ser Ala Met Ala
545 550 555 560

Arg Asp Asn Asp Leu Glu Val Glu Leu Leu Leu Glu Glu Asp Asp Glu
565 570 575

Glu Leu Pro Thr Leu Asp Val Glu Asn Asn Tyr Pro Asp Phe Leu Ile
580 585 590

Glu Glu His Glu Tyr Val Leu Asp Gln Pro Tyr Ser Ala Leu Ala Lys
595 600 605

Arg His Ser Pro Pro Glu Ala Phe Arg Asn Phe Asp Tyr Phe Asp Val
610 615 620

Asp Glu Asp Glu Leu Asp Glu Asp Glu Glu Thr Val Glu Glu Asp Glu
625 630 635 640

Glu Glu Glu Glu Glu Glu Glu Glu Thr Lys Ser Val Gly Ile Leu Gln
645 650 655

Gln Ser Leu Phe Asn Pro Arg Lys Thr Trp Arg Lys Ser Thr Ile Asn
660 665 670

Asn Ser Trp Ser Gly Val Thr Glu Pro Glu Pro Glu Pro Asp Pro Glu
675 680 685

Sequence listing as filed1.txt

Pro Asp Arg Ile Asp Val Leu Thr Leu Asp Met Tyr Ser His Thr Ser
690 695 700

Ile Asp Lys Gly Thr Asn Tyr Gly Gly Ser Ile Ala Gln Ser Ser Ile
705 710 715 720

Asp Pro Ala Glu Thr Ala Glu Asn Arg Glu Leu Ser Glu Leu Glu Gln
725 730 735

His Leu Glu Ser Ser Tyr Ser Phe Ala Glu Ser Tyr Asn Ser Leu Leu
740 745 750

Asn Glu Gln Glu Glu Gln Glu Ala Arg Ser Arg Ser Ala Ala Ala Ala
755 760 765

Ala Ala Ala Ala Glu Ala Ala Ala Val Glu Ala Gln Gln Thr Thr Ala
770 775 780

His Ser Ala Ser Val Val Leu Asp Arg Ser Met Leu Glu Ile Ile Gln
785 790 795 800

Glu Gln Gln His Tyr Gln Gln Gln Glu Gly Tyr Ser Leu Thr Gln Leu
805 810 815

Glu Thr Arg Arg Glu Arg Glu Arg Leu Thr Glu Ser Trp Pro Gln Gln
820 825 830

Pro Ala Glu Leu Leu Glu Leu Asp Ala Leu Leu Gln Gln Glu Arg Ala
835 840 845

Glu Glu Glu Gln Val Ala Leu Glu Gln Gln Gln Gln Arg Glu Gln Gln
850 855 860

Met Glu Gln Met Glu Val Glu Ala Ile Ser Ser Ser Gly Gln His Glu
865 870 875 880

Phe Ala Tyr Pro Val Thr Thr Ala Thr Ala Ser Glu Trp Cys Ala Thr
885 890 895

Leu Gln Glu Asp Glu Glu Glu Leu Asp Ser Thr Val Ile Asp Ile Val
900 905 910

Ile Gln Pro Glu Gln Glu Leu Gln Asp Asn Glu Val Ser Ser Thr Leu
915 920 925

Pro Ala Thr Pro Thr His Val Glu Pro Glu Gln Ile Val Asp Lys Met
930 935 940

Sequence listing as filed1.txt

Glu Pro Leu Lys Val Gln Glu Met Leu Thr Ala Val Glu Lys Pro Pro
945 950 955 960

Ser Lys Gln Glu Lys Lys Leu Pro Lys Lys Gln Glu Thr Lys Gln Val
965 970 975

Ala Val Leu Asp Thr Val Ala Glu Met Pro Lys Glu Asp Ala His Ala
980 985 990

Val His Tyr Ile Phe Gln Arg Ile Gln Lys Val Gln Asp Ser Glu Ala
995 1000 1005

Thr Pro Val Ala Val Thr Asn Ser Thr Met Ala Asp Ala Leu Pro
1010 1015 1020

Thr Glu Ser Ser Gly Leu Gly Gly Ser Met Thr Ala Pro Arg Ile
1025 1030 1035

Arg Arg Tyr Arg Asn Val Pro Asn Glu Asn His Gln His Met Gln
1040 1045 1050

Thr Arg Arg Arg Gln Ile Phe Lys His Val Lys Pro Lys Ser Phe
1055 1060 1065

Ile Gln Ser Ser Ala Ala Ala Ile Val Ala Tyr Gly Asp Ser Thr
1070 1075 1080

Glu Thr Val Gly Gly Thr Ala Gly Ala Ser Gly Thr Pro Ala Ala
1085 1090 1095

Gly Arg Val Gly Gly Gly Gly Gly Gly Gly Gly Gly Arg Gly Ser
1100 1105 1110

Ala Ser Gly Gly Ser Ser Pro Ala Val Ala Ala Asn Ser Arg Arg
1115 1120 1125

Ser Val Asn Val Val Ala Asn Ala Ser Gly Asn Ser Ala Ser Lys
1130 1135 1140

Val Val Pro Ser Ser Ser Ser Met Met Met Thr Arg Arg Ser His
1145 1150 1155

Thr Leu Thr Ala Ser Gly Gly Val Asn Lys Arg Gln Leu Arg Ser
1160 1165 1170

Ser Leu Cys Thr Leu Gly Leu Gly Val Gly Val Gly Val Gly Leu
1175 1180 1185

Sequence listing as filed1.txt

Gly	Met	Asp	Leu	Asp	Met	Thr	Lys	Arg	Thr	Leu	Arg	Thr	Arg	Asn
	1190					1195					1200			
Val	Pro	Ala	Leu	Ser	Gly	Gly	Ser	Ala	Thr	Pro	Ser	Ser	Asn	Ser
	1205					1210					1215			
Ser	Pro	Ala	Ser	Gly	Gly	Ser	Ser	Pro	Ala	Gly	Phe	Thr	Ser	Pro
	1220					1225					1230			
Ala	Ser	Pro	Val	Ile	Thr	Ser	Arg	Gly	Ser	Gly	Ser	Arg	Thr	Thr
	1235					1240					1245			
Ala	Ser	Pro	Ala	Arg	Arg	Leu	Lys	Arg	Ser	His	Glu	Asp	Arg	Glu
	1250					1255					1260			
Gln	Arg	Met	Ser	Leu	Arg	Arg	Ser	Thr	Leu	Ser	Gly	Ser	Ala	Ser
	1265					1270					1275			
Gly	Ser	Gly	Leu	Val	Gly	Thr	Gly	Gly	Ser	Pro	Ser	Asn	Val	Lys
	1280					1285					1290			
Ser	Asn	Arg	Leu	Gln	Ala	Cys	Asn	Gly	Ala	Ile	Ser	Ala	Arg	Pro
	1295					1300					1305			
Pro	Pro	Ser	Pro	Lys	Lys	Leu	Asn	Ala	Ala	Val	Pro	Thr	Leu	Ala
	1310					1315					1320			
Ile	Gly	Thr	Arg	Ala	Tyr	Thr	Ala	Ala	Leu	Ala	Ala	Ala	Ala	Asp
	1325					1330					1335			
His	Leu	Asn	Lys	Arg	Trp	Ser	Leu	Arg	Ser	Ser	Ser	Gly	Asn	Ser
	1340					1345					1350			
Gly	Asn	Leu	Ile	Thr	Ala	Ile	Ser	Cys	Tyr	Ser	Asp	Arg	Ser	Arg
	1355					1360					1365			
Ala	Ala	Thr	Ala	Ala	Gly	Ser	Pro	Gly	Ser	Gly	Gly	Gly	Ala	Ala
	1370					1375					1380			
Gly	Pro	Pro	Gly	Ala	Ser	Leu	Ala	Ala	Ser	Thr	Val	Gly	Thr	Arg
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Arg	Arg													
	1400													

<210> 134

Sequence listing as filed1.txt

<211> 2973

<212> DNA

<213> Homo sapiens

<400> 134

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gttggccggc gagcgccctag tgtgtctccc gccgccggat tcggcgggct gcgtgggacc	180
ggcgggatcc cggccagccg gccatggcgg ggctgtactc gctgggagtg agcgtcttct	240
ccgaccaggg cgggaggaag tacatggagg acgttactca aatcgttgtg gagcccgaac	300
cgacggctga agaaaagccc tcgccgcggc ggtcgctgtc tcagccgttg cctccgcggc	360
cgtcgccggc cgcccttccc ggcggcgaag tctcggggaa aggccagcg gtggcagccc	420
gagaggctcg cgaccctctc ccggacgccg gggcctcgcc ggcacctagc cgctgctgcc	480
gccgccgttc ctccgtggcc tttttcgccg tgtgcgacgg gcacggcggg cgggaggcgg	540
cacagtttgc ccgggagcac ttgtgggggt tcatcaagaa gcagaagggt ttcacctcgt	600
ccgagccggc taaggtttgc gctgccatcc gcaaaggctt tctcgcttgt caccttgcca	660
tgtggaagaa actggcggaa tggccaaaga ctatgacggg tcttcctagc acatcaggga	720
caactgccag tgtggtcatc attcggggca tgaagatgta tgtagctcac gtaggtgact	780
caggggtggt tcttggaatt caggatgacc cgaaggatga ctttgtcaga gctgtggagg	840
tgacacagga ccataagcca gaacttccca aggaaagaga acgaatcgaa ggacttggtg	900
ggagtgtaat gaacaagtct ggggtgaatc gtgtagtttg gaaacgacct cgactcactc	960
acaatggacc tgtagaagg agcacagtta ttgaccagat tccttttctg gcagtagcaa	1020
gagcacttgg tgatttgtgg agctatgatt tcttcagtgg tgaatttgtg gtgtcacctg	1080
aaccagacac aagtgtccac actcttgacc ctcagaagca caagtatatt atattgggga	1140
gtgatggact ttggaatatg attccaccac aagatgccat ctcaatgtgc caggaccaag	1200
aggagaaaaa atacctgatg ggtgagcatg gacaatcttg tgccaaaatg cttgtgaatc	1260
gagcattggg ccgctggagg cagcgtatgc tccgagcaga taacactagt gccatagtaa	1320
tctgcatctc tccagaagtg gacaatcagg gaaactttac caatgaagat gagttatacc	1380
tgaacctgac tgacagccct tcctataata gtcaagaaac ctgtgtgatg actccttccc	1440
catgttctac accaccagtc aagtcactgg aggaggatcc atggccaagg gtgaattcta	1500
aggaccatat acctgccctg gttcgtagca atgccttctc agagaatttt ttagaggttt	1560
cagctgagat agctcgagag aatgtccaag gtgtagtcac accctcaaaa gatccagaac	1620

Sequence listing as filed1.txt

cacttgaaga aaattg	cgct aaagccctga	ctttaaggat	acatgattct	ttgaataata	1680
gccttccaat tggcctt	gtg cctactaatt	caacaaacac	tgtcatggac	caaaaaaatt	1740
tgaagatgtc aactcct	ggc caaatgaaag	cccaagaaat	tgaaagaacc	cctccaacaa	1800
actttaaaag gacattag	aa gagtccaatt	ctggccccct	gatgaagaag	catagacgaa	1860
atggcctaag tcgaagtag	t ggtgctcagc	ctgcaagtct	ccccacaacc	tcacagcgaa	1920
agaactctgt taaactcacc	atgcgacgca	gacttagggg	ccagaagaaa	attggaaatc	1980
ctttacttca tcaacacagg	aaaactgttt	gtgtttgctg	aaatgcatct	gggaaatgag	2040
gtttttccaa acttaggata	taagagggct	ttttaaattt	ggtgccgatg	ttgaactttt	2100
tttaagggga gaaaattaaa	agaaatatac	agtttgactt	tttggaattc	agcagtttta	2160
tcctggcctt gtacttgctt	gtattgtaaa	tgtggatttt	gtagatgtta	gggtataagt	2220
tgctgtaaaa tttgtgtaaa	tttgtatcca	cacaaattca	gtctctgaat	acacagtatt	2280
cagagtctct gatacacagt	aattgtgaca	ataggggctaa	atgttttaaag	aatcaaaaag	2340
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taagccactt gtcttgaaaa	ctgtgcaact	ttttaaagta	aattattaag	cagactggaa	2460
aagtgatgta ttttcatagt	gacctgtgtt	tcacttaatg	tttcttagag	ccaagtgtct	2520
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ttgagccatg ctacagttag	tcttgtccca	attaaaatac	tatgcagtat	ctcttacatc	2640
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gcattattag gtcttaaaagt	agttactccc	ttctctgtgtt	tgcttaaaat	atgtgaagtt	2820
ttccttgcta tttcaataac	agatgggtgct	gctaattccc	aacatttctt	aaattatttt	2880
atatcataca gttttcattg	attatatggg	tatatattca	tctaataaat	cagtgaactg	2940
ttcctcatgt tgctgaaaaa	aaaaaaaaaa	aaa			2973

<210> 135

<211> 605

<212> PRT

<213> Homo sapiens

<400> 135

Met	Ala	Gly	Leu	Tyr	Ser	Leu	Gly	Val	Ser	Val	Phe	Ser	Asp	Gln	Gly
1				5				10						15	

Sequence listing as filed1.txt

Gly Arg Lys Tyr Met Glu Asp Val Thr Gln Ile Val Val Glu Pro Glu
20 25 30

Pro Thr Ala Glu Glu Lys Pro Ser Pro Arg Arg Ser Leu Ser Gln Pro
35 40 45

Leu Pro Pro Arg Pro Ser Pro Ala Ala Leu Pro Gly Gly Glu Val Ser
50 55 60

Gly Lys Gly Pro Ala Val Ala Ala Arg Glu Ala Arg Asp Pro Leu Pro
65 70 75 80

Asp Ala Gly Ala Ser Pro Ala Pro Ser Arg Cys Cys Arg Arg Arg Ser
85 90 95

Ser Val Ala Phe Phe Ala Val Cys Asp Gly His Gly Gly Arg Glu Ala
100 105 110

Ala Gln Phe Ala Arg Glu His Leu Trp Gly Phe Ile Lys Lys Gln Lys
115 120 125

Gly Phe Thr Ser Ser Glu Pro Ala Lys Val Cys Ala Ala Ile Arg Lys
130 135 140

Gly Phe Leu Ala Cys His Leu Ala Met Trp Lys Lys Leu Ala Glu Trp
145 150 155 160

Pro Lys Thr Met Thr Gly Leu Pro Ser Thr Ser Gly Thr Thr Ala Ser
165 170 175

Val Val Ile Ile Arg Gly Met Lys Met Tyr Val Ala His Val Gly Asp
180 185 190

Ser Gly Val Val Leu Gly Ile Gln Asp Asp Pro Lys Asp Asp Phe Val
195 200 205

Arg Ala Val Glu Val Thr Gln Asp His Lys Pro Glu Leu Pro Lys Glu
210 215 220

Arg Glu Arg Ile Glu Gly Leu Gly Gly Ser Val Met Asn Lys Ser Gly
225 230 235 240

Val Asn Arg Val Val Trp Lys Arg Pro Arg Leu Thr His Asn Gly Pro
245 250 255

Val Arg Arg Ser Thr Val Ile Asp Gln Ile Pro Phe Leu Ala Val Ala
260 265 270

Sequence listing as filed1.txt

Arg Ala Leu Gly Asp Leu Trp Ser Tyr Asp Phe Phe Ser Gly Glu Phe
275 280 285

Val Val Ser Pro Glu Pro Asp Thr Ser Val His Thr Leu Asp Pro Gln
290 295 300

Lys His Lys Tyr Ile Ile Leu Gly Ser Asp Gly Leu Trp Asn Met Ile
305 310 315 320

Pro Pro Gln Asp Ala Ile Ser Met Cys Gln Asp Gln Glu Glu Lys Lys
325 330 335

Tyr Leu Met Gly Glu His Gly Gln Ser Cys Ala Lys Met Leu Val Asn
340 345 350

Arg Ala Leu Gly Arg Trp Arg Gln Arg Met Leu Arg Ala Asp Asn Thr
355 360 365

Ser Ala Ile Val Ile Cys Ile Ser Pro Glu Val Asp Asn Gln Gly Asn
370 375 380

Phe Thr Asn Glu Asp Glu Leu Tyr Leu Asn Leu Thr Asp Ser Pro Ser
385 390 395 400

Tyr Asn Ser Gln Glu Thr Cys Val Met Thr Pro Ser Pro Cys Ser Thr
405 410 415

Pro Pro Val Lys Ser Leu Glu Glu Asp Pro Trp Pro Arg Val Asn Ser
420 425 430

Lys Asp His Ile Pro Ala Leu Val Arg Ser Asn Ala Phe Ser Glu Asn
435 440 445

Phe Leu Glu Val Ser Ala Glu Ile Ala Arg Glu Asn Val Gln Gly Val
450 455 460

Val Ile Pro Ser Lys Asp Pro Glu Pro Leu Glu Glu Asn Cys Ala Lys
465 470 475 480

Ala Leu Thr Leu Arg Ile His Asp Ser Leu Asn Asn Ser Leu Pro Ile
485 490 495

Gly Leu Val Pro Thr Asn Ser Thr Asn Thr Val Met Asp Gln Lys Asn
500 505 510

Leu Lys Met Ser Thr Pro Gly Gln Met Lys Ala Gln Glu Ile Glu Arg
Page 134

Sequence listing as filed1.txt

515

520

525

Thr Pro Pro Thr Asn Phe Lys Arg Thr Leu Glu Glu Ser Asn Ser Gly
530 535 540

Pro Leu Met Lys Lys His Arg Arg Asn Gly Leu Ser Arg Ser Ser Gly
545 550 555 560

Ala Gln Pro Ala Ser Leu Pro Thr Thr Ser Gln Arg Lys Asn Ser Val
565 570 575

Lys Leu Thr Met Arg Arg Arg Leu Arg Gly Gln Lys Lys Ile Gly Asn
580 585 590

Pro Leu Leu His Gln His Arg Lys Thr Val Cys Val Cys
595 600 605

<210> 136

<211> 556

<212> DNA

<213> Drosophila melanogaster

<400> 136

gatatccggt taacgcaagt gttgctgac gacaaacaaa cccagaatgg caccagaggaa	60
ggctaaagtt cagaaggagg aggttcaggt ccagctggga cccaagtgc ggcacggcga	120
gatcgtgttc ggagtggctc acatctacgc cagcttcaac gacaccttcg tccatgtcac	180
tgatctgtcc ggccgtgaga ccatcgctcg tgtcaccgga ggcatgaagg tgaaggccga	240
tcgtgatgag gcttcgccct acgccgctat gttggccgct caggatgtgg ctgagaagtg	300
caagacactg ggcatcactg ccctgcatat taagctgcgt gccaccggcg gcaacaagac	360
caagaccccc ggaccggcg cccagtccgc tctgcgtgct ttggcccgtt cgtccatgaa	420
gattggccgc atcgaggatg tgacgcccac cccatcggac tccaccgcga ggaagggcgg	480
tcgccgtggt cgtcgtctgt agatggcagt atctggaaag cagtagtcta tgtttgcggt	540
cgaaatacaa tactgc	556

<210> 137

<211> 151

<212> PRT

<213> Drosophila melanogaster

Sequence listing as filed1.txt

<400> 137

Met Ala Pro Arg Lys Ala Lys Val Gln Lys Glu Glu Val Gln Val Gln
 1 5 10 15
 Leu Gly Pro Gln Val Arg Asp Gly Glu Ile Val Phe Gly Val Ala His
 20 25 30
 Ile Tyr Ala Ser Phe Asn Asp Thr Phe Val His Val Thr Asp Leu Ser
 35 40 45
 Gly Arg Glu Thr Ile Ala Arg Val Thr Gly Gly Met Lys Val Lys Ala
 50 55 60
 Asp Arg Asp Glu Ala Ser Pro Tyr Ala Ala Met Leu Ala Ala Gln Asp
 65 70 75 80
 Val Ala Glu Lys Cys Lys Thr Leu Gly Ile Thr Ala Leu His Ile Lys
 85 90 95
 Leu Arg Ala Thr Gly Gly Asn Lys Thr Lys Thr Pro Gly Pro Gly Ala
 100 105 110
 Gln Ser Ala Leu Arg Ala Leu Ala Arg Ser Ser Met Lys Ile Gly Arg
 115 120 125
 Ile Glu Asp Val Thr Pro Ile Pro Ser Asp Ser Thr Arg Arg Lys Gly
 130 135 140
 Gly Arg Arg Gly Arg Arg Leu
 145 150

<210> 138

<211> 775

<212> DNA

<213> Drosophila melanogaster

<400> 138

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cccctaaact taaaaaatgt gccttcctcc agagtgttca gagcgtcgac tgaaaatgac	120
aaacaagctg cccggcagct aatttttttt tacatttttt gttttgtttg ttcgcacgca	180
tttgttttta tttgtgaaac acgtgggtata aatgtggaaa ttcccttgct attcccgag	240

Sequence listing as filed1.txt

ttgctgatcg acaaacaac ccagaatggc acccaggaag gctaaagttc agaaggagga	300
ggttcaggtc cagctgggac cccaagttcg cgacggcgag atcgtgttcg gagtggctca	360
catctacgcc agcttcaacg acaccttcgt ccatgtcact gatctgtccg gccgtgagac	420
catcgctcgt gtcaccggag gcatgaaggt gaaggccgat cgtgatgagg cttcgcccta	480
cgccgctatg ttggccgctc aggatgtggc tgagaagtgc aagacactgg gcattactgc	540
cctgcatatt aagctgctg ccaccggcgg caacaagacc aagacccccg gaccgggcgc	600
ccagtccgct ctgctgctt tggcccggtc gtccatgaag attggccgca tcgaggatgt	660
gacgcccata ccatcggact ccaccgcag gaagggcggt cgccgtggtc gtcgtctgta	720
gatggcagta tctggaaagc agtagtctat gtttgcggtc gaaatacaat actgc	775

<210> 139

<211> 151

<212> PRT

<213> Drosophila melanogaster

<400> 139

Met	Ala	Pro	Arg	Lys	Ala	Lys	Val	Gln	Lys	Glu	Glu	Val	Gln	Val	Gln
1				5				10					15		

Leu	Gly	Pro	Gln	Val	Arg	Asp	Gly	Glu	Ile	Val	Phe	Gly	Val	Ala	His
			20					25					30		

Ile	Tyr	Ala	Ser	Phe	Asn	Asp	Thr	Phe	Val	His	Val	Thr	Asp	Leu	Ser
		35					40					45			

Gly	Arg	Glu	Thr	Ile	Ala	Arg	Val	Thr	Gly	Gly	Met	Lys	Val	Lys	Ala
	50					55					60				

Asp	Arg	Asp	Glu	Ala	Ser	Pro	Tyr	Ala	Ala	Met	Leu	Ala	Ala	Gln	Asp
65					70					75				80	

Val	Ala	Glu	Lys	Cys	Lys	Thr	Leu	Gly	Ile	Thr	Ala	Leu	His	Ile	Lys
				85					90					95	

Leu	Arg	Ala	Thr	Gly	Gly	Asn	Lys	Thr	Lys	Thr	Pro	Gly	Pro	Gly	Ala
			100					105					110		

Gln	Ser	Ala	Leu	Arg	Ala	Leu	Ala	Arg	Ser	Ser	Met	Lys	Ile	Gly	Arg
		115					120					125			

Sequence listing as filed1.txt

Ile Glu Asp Val Thr Pro Ile Pro Ser Asp Ser Thr Arg Arg Lys Gly
130 135 140

Gly Arg Arg Gly Arg Arg Leu
145 150

<210> 140

<211> 589

<212> DNA

<213> Homo sapiens

<400> 140
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ctgaaggaga gaatgtattt ggtgtctgcc atatctttgc atccttcaat gacacttttg 180
tccatgtcac tgatctttct ggcaaggaaa ccatctgccg tgtgactggg gggatgaagg 240
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cccagagggt caaggagctg ggtatcaccg ccctacacat caaactccgg gccacaggag 360
gaaataggac caagaccctt ggacctgggg ccagtcggc cctcagagcc cttgcccgtc 420
cgggtatgaa gatcgggctg attgaggatg tcacccccat cccctctgac agcactcgca 480
ggaagggggg tcgccgtggg cgccgtctgt gaacaagatt cctcaaaata ttttctgtta 540
ataaattgcc ttcatgtaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 589

<210> 141

<211> 151

<212> PRT

<213> Homo sapiens

<400> 141

Met Ala Pro Arg Lys Gly Lys Glu Lys Lys Glu Glu Gln Val Ile Ser
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Leu Gly Pro Gln Val Ala Glu Gly Glu Asn Val Phe Gly Val Cys His
20 25 30

Ile Phe Ala Ser Phe Asn Asp Thr Phe Val His Val Thr Asp Leu Ser
35 40 45

Sequence listing as filed1.txt

Gly Lys Glu Thr Ile Cys Arg Val Thr Gly Gly Met Lys Val Lys Ala
50 55 60

Asp Arg Asp Glu Ser Ser Pro Tyr Ala Ala Met Leu Ala Ala Gln Asp
65 70 75 80

Val Ala Gln Arg Cys Lys Glu Leu Gly Ile Thr Ala Leu His Ile Lys
85 90 95

Leu Arg Ala Thr Gly Gly Asn Arg Thr Lys Thr Pro Gly Pro Gly Ala
100 105 110

Gln Ser Ala Leu Arg Ala Leu Ala Arg Ser Gly Met Lys Ile Gly Arg
115 120 125

Ile Glu Asp Val Thr Pro Ile Pro Ser Asp Ser Thr Arg Arg Lys Gly
130 135 140

Gly Arg Arg Gly Arg Arg Leu
145 150

<210> 142

<211> 3081

<212> DNA

<213> Drosophila melanogaster

<400> 142

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aacacattgt agcgggttggg aagatagcag gaaagagcca gcgggctgcc gtttttcctt	180
tttgttatcc gttgccagac gcaacgaaaa cgacagttgg catttgaatt cagcacaac	240
acacatacta acgccgaccc gcaagcagca cacacacaca cactgggaca ctcgaaaaaa	300
aaaaaacaga cgctgtcggc gacctcgaca agcagttggg ttcgatttag ttgtcaatgc	360
cttgaattcg gttcggggct tagtttccac aagtttatcg ctcgtcaaga aacaacgaaa	420
taaaattatt ttcgacctaa aaaatctgac taaattgtgt tttttgttta tgtatttatt	480
taggcacatt ttgcacacca caacgtagtt actacatcta cgactaacgg aactcctcct	540
gcaagcagtg gaagttgctg tccatcaagc agtactcgga gttaacgcag gataagccgg	600
gagaaagaga aagagatcgg tggagaatag agatatacag gtggagtcaa agaggaagga	660
tcatggacat gattacggtg gggcagagcg tcaagatcaa gcggacggat ggccgcgtcc	720

Sequence listing as filed1.txt

acatggccgt ggtggcgggtg atcaaccagt cgggcaagtg catcacagtc gaatggtacg	780
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agctaattgca agatactgtc gaacagcacg ccgccccgga gcccagaagaa caagccaccg	900
cgccgatgaa cctctcgcgt aatccccacac aatcggctat cgggtggcaat ctcaccagcc	960
gtatgaccat ggccggaaac atgtgtgaaca agatccagga aagccagtcg attcccaatc	1020
cgattgtcag cagcaatagc gtgaatacaa acagcaactc caacactacg gccggcggag	1080
gtggtggcac cacaacgtcg acgaccactg gattacagcg tccacggtac tcgcaagctg	1140
ctaccggcca gcagcagaca aggatcgcct cggcgggtgcc taataacaca ttgcccgaatc	1200
ccagcgcggc agccagtgtc ggtccggcgg cacaaggagt cgccactgcg gccacaaccc	1260
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aggagaatcg cgagaagcga cgcgcccgc aggccgagat gaaggaggag aaggtggcgc	1380
tgatgaacca ggatccgggc aatccaaact gggagacggc gcaaattgata cgcgaatatc	1440
agagcacgct ggaattttgtg ccgctgctcg atggccaggc cgtcgatgac catcagatca	1500
cagtgtgcgt gcgcaagcgt cccattagcc gcaaggagggt caatcgcaag gagatcgatg	1560
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tcaccaagtt cctggagaac cacaagtttc gcttcgacta cgccttcaac gacacgtgcg	1680
acaatgccat ggtatacaaa tacacagcca agccgttgggt gaaaaccatt ttcgagggcg	1740
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gtttctttga gatttacagt ggcaagggtct tcgatcttct gtccgacaag cagaaactgc	1980
gcgtcctgga ggatggtaaa cagcaagtgc aggtgggtggg actcaccgag aaggtgggtcg	2040
atggcgtcga ggaggtagctg aagctcatcc agcacggcaa tgctgcccga acatccggcc	2100
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aatcgtgct ggccctcaag gagtgcattc gtgcgttggg caaacagtcg gccacttgc	2340
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agacgtgcat gatagccatg atctcgccgg gacttagctc ctgcgagcac acgctcaaca	2460
cgtcgcgcta tgcggatcgt gtcaaggagc tgggtgtcaa ggatatcgtc gaagtttgcc	2520
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Sequence listing as filed1.txt

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aacacgagat gtccgacgag ctgattgtgc agcaccaggc catcgacgac ctgcagcaga	2820
cggaggagat ggtggtggag tatcatcgca ccgttaatgc cacactggag accttcctcg	2880
ccgagtcgaa ggcgctgtac aatctgacca actatgtgga ctacgaccag gactcgtact	2940
gcaaacgggg cgagtcgatg ttctcgagc tgctggacat cgccatccag tgccgcgaca	3000
tgatggccga atatcgcgcc aagttggcca aggaggagat gctgtcgtgc agcttcaatt	3060
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<210> 143

<211> 803

<212> PRT

<213> Drosophila melanogaster

<400> 143

Met	Ile	Thr	Val	Gly	Gln	Ser	Val	Lys	Ile	Lys	Arg	Thr	Asp	Gly	Arg
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Val	His	Met	Ala	Val	Val	Ala	Val	Ile	Asn	Gln	Ser	Gly	Lys	Cys	Ile
			20					25					30		

Thr	Val	Glu	Trp	Tyr	Glu	Arg	Gly	Glu	Thr	Lys	Gly	Lys	Glu	Val	Glu
		35					40					45			

Leu	Asp	Ala	Ile	Leu	Thr	Leu	Asn	Pro	Glu	Leu	Met	Gln	Asp	Thr	Val
	50					55					60				

Glu	Gln	His	Ala	Ala	Pro	Glu	Pro	Lys	Lys	Gln	Ala	Thr	Ala	Pro	Met
65					70					75					80

Asn	Leu	Ser	Arg	Asn	Pro	Thr	Gln	Ser	Ala	Ile	Gly	Gly	Asn	Leu	Thr
				85					90					95	

Ser	Arg	Met	Thr	Met	Ala	Gly	Asn	Met	Leu	Asn	Lys	Ile	Gln	Glu	Ser
			100					105					110		

Gln	Ser	Ile	Pro	Asn	Pro	Ile	Val	Ser	Ser	Asn	Ser	Val	Asn	Thr	Asn
		115					120					125			

Sequence listing as filed1.txt

Ser Asn Ser Asn Thr Thr Ala Gly Gly Gly Gly Gly Thr Thr Thr Ser
130 135 140

Thr Thr Thr Gly Leu Gln Arg Pro Arg Tyr Ser Gln Ala Ala Thr Gly
145 150 155 160

Gln Gln Gln Thr Arg Ile Ala Ser Ala Val Pro Asn Asn Thr Leu Pro
165 170 175

Asn Pro Ser Ala Ala Ala Ser Ala Gly Pro Ala Ala Gln Gly Val Ala
180 185 190

Thr Ala Ala Thr Thr Gln Gly Ala Gly Gly Ala Ser Thr Arg Arg Ser
195 200 205

His Ala Leu Lys Glu Val Glu Arg Leu Lys Glu Asn Arg Glu Lys Arg
210 215 220

Arg Ala Arg Gln Ala Glu Met Lys Glu Glu Lys Val Ala Leu Met Asn
225 230 235 240

Gln Asp Pro Gly Asn Pro Asn Trp Glu Thr Ala Gln Met Ile Arg Glu
245 250 255

Tyr Gln Ser Thr Leu Glu Phe Val Pro Leu Leu Asp Gly Gln Ala Val
260 265 270

Asp Asp His Gln Ile Thr Val Cys Val Arg Lys Arg Pro Ile Ser Arg
275 280 285

Lys Glu Val Asn Arg Lys Glu Ile Asp Val Ile Ser Val Pro Arg Lys
290 295 300

Asp Met Leu Ile Val His Glu Pro Arg Ser Lys Val Asp Leu Thr Lys
305 310 315 320

Phe Leu Glu Asn His Lys Phe Arg Phe Asp Tyr Ala Phe Asn Asp Thr
325 330 335

Cys Asp Asn Ala Met Val Tyr Lys Tyr Thr Ala Lys Pro Leu Val Lys
340 345 350

Thr Ile Phe Glu Gly Gly Met Ala Thr Cys Phe Ala Tyr Gly Gln Thr
355 360 365

Gly Ser Gly Lys Thr His Thr Met Gly Gly Glu Phe Asn Gly Lys Val
370 375 380

Sequence listing as filed1.txt

Gln Asp Cys Lys Asn Gly Ile Tyr Ala Met Ala Ala Lys Asp Val Phe
385 390 395 400

Val Thr Leu Asn Met Pro Arg Tyr Arg Ala Met Asn Leu Val Val Ser
405 410 415

Ala Ser Phe Phe Glu Ile Tyr Ser Gly Lys Val Phe Asp Leu Leu Ser
420 425 430

Asp Lys Gln Lys Leu Arg Val Leu Glu Asp Gly Lys Gln Gln Val Gln
435 440 445

Val Val Gly Leu Thr Glu Lys Val Val Asp Gly Val Glu Glu Val Leu
450 455 460

Lys Leu Ile Gln His Gly Asn Ala Ala Arg Thr Ser Gly Gln Thr Ser
465 470 475 480

Ala Asn Ser Asn Ser Ser Arg Ser His Ala Val Phe Gln Ile Val Leu
485 490 495

Arg Pro Gln Gly Ser Thr Lys Ile His Gly Lys Phe Ser Phe Ile Asp
500 505 510

Leu Ala Gly Asn Glu Arg Gly Val Asp Thr Ser Ser Ala Asp Arg Gln
515 520 525

Thr Arg Met Glu Gly Ala Glu Ile Asn Lys Ser Leu Leu Ala Leu Lys
530 535 540

Glu Cys Ile Arg Ala Leu Gly Lys Gln Ser Ala His Leu Pro Phe Arg
545 550 555 560

Val Ser Lys Leu Thr Gln Val Leu Arg Asp Ser Phe Ile Gly Glu Lys
565 570 575

Ser Lys Thr Cys Met Ile Ala Met Ile Ser Pro Gly Leu Ser Ser Cys
580 585 590

Glu His Thr Leu Asn Thr Leu Arg Tyr Ala Asp Arg Val Lys Glu Leu
595 600 605

Val Val Lys Asp Ile Val Glu Val Cys Pro Gly Gly Asp Thr Glu Pro
610 615 620

Ile Glu Ile Thr Asp Asp Glu Glu Glu Glu Glu Leu Asn Met Val His
625 630 635 640

Sequence listing as filed1.txt

Pro His Ser His Gln Leu His Pro Asn Ser His Ala Pro Ala Ser Gln
645 650 655

Ser Asn Asn Gln Arg Ala Pro Ala Ser His His Ser Gly Ala Val Ile
660 665 670

His Asn Asn Asn Asn Asn Asn Asn Lys Asn Gly Asn Ala Gly Asn Met
675 680 685

Asp Leu Ala Met Leu Ser Ser Leu Ser Glu His Glu Met Ser Asp Glu
690 695 700

Leu Ile Val Gln His Gln Ala Ile Asp Asp Leu Gln Gln Thr Glu Glu
705 710 715 720

Met Val Val Glu Tyr His Arg Thr Val Asn Ala Thr Leu Glu Thr Phe
725 730 735

Leu Ala Glu Ser Lys Ala Leu Tyr Asn Leu Thr Asn Tyr Val Asp Tyr
740 745 750

Asp Gln Asp Ser Tyr Cys Lys Arg Gly Glu Ser Met Phe Ser Gln Leu
755 760 765

Leu Asp Ile Ala Ile Gln Cys Arg Asp Met Met Ala Glu Tyr Arg Ala
770 775 780

Lys Leu Ala Lys Glu Glu Met Leu Ser Cys Ser Phe Asn Ser Pro Asn
785 790 795 800

Gly Lys Arg

<210> 144

<211> 1023

<212> DNA

<213> Drosophila melanogaster

<400> 144

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agttaccaca acaaccgacg gatatcgact ccagacacca catcgcccag cgccaccatg 180

Sequence listing as filed1.txt

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cagccccaaa tccagatatc ggccatccac cactcgcgtg gatccgttgg cggaggaggc	360
ggatccaact catccaacgc tgccaccgac tactccacga gcagcgggtg caagcgggag	420
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gtcgccgctg cggccctctc gctggccaac atgtgctcca gcaatggtgg tcagcggaat	660
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gatatccggc ccacgtacac gggctcgcgc agctccacgg agcgtctcaa gcggggcatt	960
gtccatgccc gcaccttgt gcgcgaatgc ctcatggaaa cggagcgtgc ggcgcgcaa	1020
tga	1023

<210> 145

<211> 278

<212> PRT

<213> Drosophila melanogaster

<400> 145

Met	Asp	Ile	Gln	Ala	Val	Glu	Ser	Lys	Leu	Ser	Asp	Val	Thr	Val	Thr
1				5					10					15	

Pro	Ile	Pro	Arg	Ser	Gln	Val	Gln	Asn	Phe	Tyr	Asn	Tyr	Gln	Gln	Gln
			20					25					30		

Arg	Glu	Gln	Arg	Glu	Gln	Gln	Pro	Gln	Ile	Gln	Ile	Ser	Ala	Ile	His
		35					40					45			

His	Ser	Arg	Gly	Ser	Val	Gly	Gly	Gly	Gly	Gly	Ser	Asn	Ser	Ser	Asn
	50					55					60				

Ala	Ala	Thr	Asp	Tyr	Ser	Thr	Ser	Ser	Gly	Gly	Lys	Arg	Glu	Arg	Asp
65					70					75				80	

Sequence listing as filed1.txt

Arg Ser Ser Ala Ser Asp Tyr Ser Ser Ser Ser Ser Lys Gln Ser Ser
85 90 95

Ala Ala Ala Ala Asn Ala Ala Ala Ala Ala Ala Ala Val Ala Ala Leu
100 105 110

Gln Tyr Ser Pro Gln Phe Leu Gln Ala Gln Leu Ala Leu Leu Gln Gln
115 120 125

Gln Ser Asn Thr Thr Ala Thr Pro Ala Ala Val Ala Ala Ala Ala Leu
130 135 140

Ser Leu Ala Asn Met Cys Ser Ser Asn Gly Gly Gln Arg Asn Ser Gly
145 150 155 160

Ala Gly Val Ser Ser Thr Ser Ser Gly Ser Asn Gly Gln Ser Met Gly
165 170 175

Leu Asn Leu Ser Ser Ser Gln Leu Lys Tyr Pro Pro Pro Ser Thr Ser
180 185 190

Pro Val Val Val Thr Thr Gln Thr Ser Ala Asn Ile Thr Thr Pro Leu
195 200 205

Thr Ser Thr Ala Ser Leu Pro Ser Val Gly Pro Gly Asn Gly Leu Thr
210 215 220

Lys Tyr Ala Gln Leu Leu Ala Val Ile Glu Glu Met Gly Arg Asp Ile
225 230 235 240

Arg Pro Thr Tyr Thr Gly Ser Arg Ser Ser Thr Glu Arg Leu Lys Arg
245 250 255

Gly Ile Val His Ala Arg Ile Leu Val Arg Glu Cys Leu Met Glu Thr
260 265 270

Glu Arg Ala Ala Arg Gln
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<210> 146

<211> 2905

<212> DNA

<213> Homo sapiens

<400> 146

Sequence listing as filed1.txt						
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gaagtctctc	cacagtgtgt	tactttccac	gaagctgttt	cacaaatggg	agaaatggaa	1800
gaacaagttg	tagaagatca	cagggcagtg	ttccaggaat	ctattcggtg	gttagaagat	1860
gaaaaggccc	tcttagagat	gactgaagaa	gtagattatg	atgtcgattc	atatgctaca	1920

Sequence listing as filed1.txt

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gtaacataca acggttcagc tgtaagggcc atttgaaagt ttggaatttt aagtgtctgt 2160
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acaaaatgct tctagtccag gaggcacaac caagaactgg gattaatgaa gcattttgtt 2280
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tattatttta aaaccatata acatgtgatt ataatttttc ttagcatttt ctttgtaaag 2820
aactacaata taaactagtt ggtgtataat aaaaagtaat gaaattctga agaaaaaaaa 2880
aaaaaaaaaa aaaaaaaaaa aaaaaa 2905

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<210> 147

<211> 679

<212> PRT

<213> Homo sapiens

<400> 147

Met Val Thr Ser Leu Asn Glu Asp Asn Glu Ser Val Thr Val Glu Trp
1 5 10 15

Ile Glu Asn Gly Asp Thr Lys Gly Lys Glu Ile Asp Leu Glu Ser Ile
20 25 30

Phe Ser Leu Asn Pro Asp Leu Val Pro Asp Glu Glu Ile Glu Pro Ser
35 40 45

Pro Glu Thr Pro Pro Pro Pro Ala Ser Ser Ala Lys Val Asn Lys Ile
50 55 60

Sequence listing as filed1.txt

Val Lys Asn Arg Arg Thr Val Ala Ser Ile Lys Asn Asp Pro Pro Ser
 65 70 75 80
 Arg Asp Asn Arg Val Val Gly Ser Ala Arg Ala Arg Pro Ser Gln Phe
 85 90 95
 Pro Glu Gln Ser Ser Ser Ala Gln Gln Asn Gly Ser Val Ser Asp Ile
 100 105 110
 Ser Pro Val Gln Ala Ala Lys Lys Glu Phe Gly Pro Pro Ser Arg Arg
 115 120 125
 Lys Ser Asn Cys Val Lys Glu Val Glu Lys Leu Gln Glu Lys Arg Glu
 130 135 140
 Lys Arg Arg Leu Gln Gln Gln Glu Leu Arg Glu Lys Arg Ala Gln Asp
 145 150 155 160
 Val Asp Ala Thr Asn Pro Asn Tyr Glu Ile Met Cys Met Ile Arg Asp
 165 170 175
 Phe Arg Gly Ser Leu Asp Tyr Arg Pro Leu Thr Thr Ala Asp Pro Ile
 180 185 190
 Asp Glu His Arg Ile Cys Val Cys Val Arg Lys Arg Pro Leu Asn Lys
 195 200 205
 Lys Glu Thr Gln Met Lys Asp Leu Asp Val Ile Thr Ile Pro Ser Lys
 210 215 220
 Asp Val Val Met Val His Glu Pro Lys Gln Lys Val Asp Leu Thr Arg
 225 230 235 240
 Tyr Leu Glu Asn Gln Thr Phe Arg Phe Asp Tyr Ala Phe Asp Asp Ser
 245 250 255
 Ala Pro Asn Glu Met Val Tyr Arg Phe Thr Ala Lys Pro Leu Val Glu
 260 265 270
 Thr Ile Phe Glu Arg Gly Met Ala Thr Cys Phe Ala Tyr Gly Gln Thr
 275 280 285
 Gly Ser Gly Lys Thr His Thr Met Gly Gly Asp Phe Ser Gly Lys Asn
 290 295 300
 Gln Asp Cys Ser Lys Gly Ile Tyr Ala Leu Ala Ala Arg Asp Val Phe
 305 310 315 320

Sequence listing as filed1.txt

Leu Met Leu Lys Lys Pro Asn Tyr Lys Lys Leu Glu Leu Gln Val Tyr
 325 330 335
 Ala Thr Phe Phe Glu Ile Tyr Ser Gly Lys Val Phe Asp Leu Leu Asn
 340 345 350
 Arg Lys Thr Lys Leu Arg Val Leu Glu Asp Gly Lys Gln Gln Val Gln
 355 360 365
 Val Val Gly Leu Gln Glu Arg Glu Val Lys Cys Val Glu Asp Val Leu
 370 375 380
 Lys Leu Ile Asp Ile Gly Asn Ser Cys Arg Thr Ser Gly Gln Thr Ser
 385 390 395 400
 Ala Asn Ala His Ser Ser Arg Ser His Ala Val Phe Gln Ile Ile Leu
 405 410 415
 Arg Arg Lys Gly Lys Leu His Gly Lys Phe Ser Leu Ile Asp Leu Ala
 420 425 430
 Gly Asn Glu Arg Gly Ala Asp Thr Ser Ser Ala Asp Arg Gln Thr Arg
 435 440 445
 Leu Glu Gly Ala Glu Ile Asn Lys Ser Leu Leu Ala Leu Lys Glu Cys
 450 455 460
 Ile Arg Ala Leu Gly Arg Asn Lys Pro His Thr Pro Phe Arg Ala Ser
 465 470 475 480
 Lys Leu Thr Gln Val Leu Arg Asp Ser Phe Ile Gly Glu Asn Ser Arg
 485 490 495
 Thr Cys Met Ile Ala Thr Ile Ser Pro Gly Met Ala Ser Cys Glu Asn
 500 505 510
 Thr Leu Asn Thr Leu Arg Tyr Ala Asn Arg Val Lys Glu Leu Thr Val
 515 520 525
 Asp Pro Thr Ala Ala Gly Asp Val Arg Pro Ile Met His His Pro Pro
 530 535 540
 Asn Gln Ile Asp Asp Leu Glu Thr Gln Trp Gly Val Gly Ser Ser Pro
 545 550 555 560
 Gln Arg Asp Asp Leu Lys Leu Leu Cys Glu Gln Asn Glu Glu Glu Val

Sequence listing as filed1.txt

565

570

575

Ser Pro Gln Leu Phe Thr Phe His Glu Ala Val Ser Gln Met Val Glu
580 585 590

Met Glu Glu Gln Val Val Glu Asp His Arg Ala Val Phe Gln Glu Ser
595 600 605

Ile Arg Trp Leu Glu Asp Glu Lys Ala Leu Leu Glu Met Thr Glu Glu
610 615 620

Val Asp Tyr Asp Val Asp Ser Tyr Ala Thr Gln Leu Glu Ala Ile Leu
625 630 635 640

Glu Gln Lys Ile Asp Ile Leu Thr Glu Leu Arg Asp Lys Val Lys Ser
645 650 655

Phe Arg Ala Ala Leu Gln Glu Glu Glu Gln Ala Ser Lys Gln Ile Asn
660 665 670

Pro Lys Arg Pro Arg Ala Leu
675

<210> 148

<211> 1158

<212> DNA

<213> Homo sapiens

<400> 148

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accgcccggc ctcgccgccg ccgccgccgc cctcgcggcc tggccccgcc gcgcccggcg      60
cgcccgccgc ccgggggggat gtcttacaaa ccgaacttgg ccgcgcacat gcccgccgcc      120
gccctcaacg ccgctgggag tgtccactcg ccttcacca gcatggcaac gtcttcacag      180
taccgccagc tgctcagtga ctacgggcca ccgtccctag gctacacca gggaactggg      240
aacagccagg tgccccaag caaatacgcg gagctgctgg ccatcattga agagctgggg      300
aaggagatca gaccacgta cgcagggagc aagagtgcc tggagaggct gaagcgcggc      360
atcattcacg ctagaggact ggttcgggag tgcttggcag aaacggaacg gaatgccaga      420
tcctagctgc cttgttggtt ttgaaggatt tccatctttt tacaagatga gaagttacag      480
ttcatctccc ctgttcagat gaaacccttg ttttcaaat ggttacagtt tcgtttttcc      540
tcccatgggt cacttggctc tgaacctaca gtctcaaaga ttgagaaaag attttgcagt      600
taattaggat ttgcatttta agtagttagg aactgcccag gtttttttg ttttttaagc      660
```

Sequence listing as filed1.txt

```

attgatttaa aagatgcacg gaaagttatc ttacagcaaa ctgtagtttg cctccaagac 720
accattgtct ccccttaatc ttctcttttg tatacatttg ttacccatgg tggtctttgt 780
tccttttcat aagctaatac cactgtaggg attttgtttt gaacgcatat tgacagcacg 840
ctttacttag tagccggttc ccatttgcca tacaatgtag gttctgctta atgtaacttc 900
ttttttgctt aagcatttgc atgactatta gtgcttcaaa gtcaattttt aaaaatgcac 960
aagttataaa tacagaagaa agagcaaccc accaaaccta acaaggaccc ccgaacactt 1020
tcatactaag actgtaagta gatctcagtt ctgcgtttat tgtaagttga taaaaacatc 1080
tgaggaggaaa tgactaaaac tgtttgcac tttgtatgta tttattactt gatgtaataa 1140
agcttatttt cattaacc 1158

```

<210> 149

<211> 115

<212> PRT

<213> Homo sapiens

<400> 149

```

Met Ser Tyr Lys Pro Asn Leu Ala Ala His Met Pro Ala Ala Ala Leu
1      5      10      15
Asn Ala Ala Gly Ser Val His Ser Pro Ser Thr Ser Met Ala Thr Ser
20     25     30
Ser Gln Tyr Arg Gln Leu Leu Ser Asp Tyr Gly Pro Pro Ser Leu Gly
35     40     45
Tyr Thr Gln Gly Thr Gly Asn Ser Gln Val Pro Gln Ser Lys Tyr Ala
50     55     60
Glu Leu Leu Ala Ile Ile Glu Glu Leu Gly Lys Glu Ile Arg Pro Thr
65     70     75     80
Tyr Ala Gly Ser Lys Ser Ala Met Glu Arg Leu Lys Arg Gly Ile Ile
85     90     95
His Ala Arg Gly Leu Val Arg Glu Cys Leu Ala Glu Thr Glu Arg Asn
100    105    110
Ala Arg Ser
115

```

Sequence listing as filed1.txt

<210> 150
 <211> 607
 <212> DNA
 <213> Drosophila melanogaster

<220>
 <221> misc_feature
 <222> 565, 576, 587, 590, 591
 <223> n is a or g or c or t

<400> 150	
catcatgtat catacattga agacggatta gcaccgtcga ccacgaaaaa agaacgcaag	60
gaaatcgtgc aaaatgttca aaaagtacgt atggcatgag ttagatgggg acatcagact	120
aaccatagca attcgatctg tgcagattcg aagagaagga cagcatttcc agcattcagc	180
agctgaagtc gtctgtgcag aagggcatac gtgccaagtt gctggaggcc tatcccaagt	240
tggagagtca catcgacctg atcctgcccc agaaggactc gtaccgcatc gccaagtggg	300
aggatggctc agttcttgcc acagcacata actccattca tattcccgat ccctactcct	360
ccaccagcca tgaccacatc gaactgctgc taaacggagc cggcgaccag gtgttctttc	420
gccaccgcca tggcccctgg atgcctaccc tgcgcaactg ttgggaaggg cgatcgggtc	480
gggcctcttc gctattacgc cagctggcga aaggggggat gtgctgcaag gcgattaagt	540
tgggtaacgc cagggttttc ccagncacga cgttgnaaaa cgacggncan ngccaagctc	600
tgctgct	607

<210> 151
 <211> 630
 <212> DNA
 <213> Drosophila melanogaster

<400> 151	
cggattagca ccgtcgacca cgaaaaaaga acgcaaggaa atcgtgcaaa atgttcaaaa	60
aattcgaaga gaaggacagc atttccagca ttcagcagct gaagtcgtct gtgcagaagg	120
gcatacgtgc caagttgctg gaggcctatc ccaagttgga gagtcacatc gacctgatcc	180
tgcccaagaa ggactcgtac cgcacgcga agtgccatga ccacatcgaa ctgctgctaa	240

Sequence listing as filed1.txt

acggagccgg cgaccaggtg ttctttcgcc accgcgatgg cccctggatg cctaccctgc	300
gcctcctgca caagtcccc tacttcgtga ccatgcagca agtggacaaa ggcgccatcc	360
gcttcgtcct gagcggagcg aacgtcatgt gtcccggcct cacatcgcca ggcgcctgta	420
tgacgccggc cgacaaggac accgtggtgg ccatcatggc tgagggcaag gagcacgccc	480
tggccgttgg actcctcacg ttatccacac aggaaattct ggcgaagaac aaaggcatcg	540
gtatcgagac gtaccacttc ctcaacgacg gcctgtggaa gtcgaagccc gtgaagtagg	600
cgaaatagga atctgcactt gcacttttta	630

<210> 152

<211> 182

<212> PRT

<213> Drosophila melanogaster

<400> 152

Met	Phe	Lys	Lys	Phe	Glu	Glu	Lys	Asp	Ser	Ile	Ser	Ser	Ile	Gln	Gln
1				5					10					15	
Leu	Lys	Ser	Ser	Val	Gln	Lys	Gly	Ile	Arg	Ala	Lys	Leu	Leu	Glu	Ala
			20					25					30		
Tyr	Pro	Lys	Leu	Glu	Ser	His	Ile	Asp	Leu	Ile	Leu	Pro	Lys	Lys	Asp
		35					40					45			
Ser	Tyr	Arg	Ile	Ala	Lys	Cys	His	Asp	His	Ile	Glu	Leu	Leu	Leu	Asn
		50				55					60				
Gly	Ala	Gly	Asp	Gln	Val	Phe	Phe	Arg	His	Arg	Asp	Gly	Pro	Trp	Met
65					70					75					80
Pro	Thr	Leu	Arg	Leu	Leu	His	Lys	Phe	Pro	Tyr	Phe	Val	Thr	Met	Gln
				85					90					95	
Gln	Val	Asp	Lys	Gly	Ala	Ile	Arg	Phe	Val	Leu	Ser	Gly	Ala	Asn	Val
			100					105					110		
Met	Cys	Pro	Gly	Leu	Thr	Ser	Pro	Gly	Ala	Cys	Met	Thr	Pro	Ala	Asp
		115					120					125			
Lys	Asp	Thr	Val	Val	Ala	Ile	Met	Ala	Glu	Gly	Lys	Glu	His	Ala	Leu
	130					135					140				

Sequence listing as filed1.txt

Ala Val Gly Leu Leu Thr Leu Ser Thr Gln Glu Ile Leu Ala Lys Asn
145 150 155 160

Lys Gly Ile Gly Ile Glu Thr Tyr His Phe Leu Asn Asp Gly Leu Trp
165 170 175

Lys Ser Lys Pro Val Lys
180

<210> 153

<211> 943

<212> DNA

<213> Homo sapiens

<400> 153
gctacctcca actgctgagg aaccggttgc ctaaaaggag ccggcaaaag cgcctacgtg 60
gagtccagag gagcgggaagt agtcagattt gactgagagc cgtaaagcgc ggctggctct 120
cgttttccgg ataacgacta cagctccgac tgtcagtgcc ggccttcctc gtgtgagggg 180
atctgccgga cccctgcaaa ttcaatttct ttccatttcc gggcccttcc ctatcgtcgc 240
ccccttcacc ttggatcatg ttcaagaaat ttgatgaaaa agaaaatgtg tccaactgca 300
tccagttgaa aacttcagtt attaagggta ttaagaatca attgatagag caatttccag 360
gtattgaacc atggcttaat caaatcatgc ctaagaaaga tcctgtcaaa atagtccgat 420
gccatgaaca tatagaaatc cttacagtaa atggagaatt actctttttt agacaaagag 480
aagggccttt ttatccaacc ctaagattac ttcacaaata tccttttatc ctgccacacc 540
agcaggttga taaaggagcc atcaaatttg tactcagtgg agcaaatac atgtgtccag 600
gcttaacttc tcctggagct aagctttacc ctgctgcagt agataccatt gttgctatca 660
tggcagaagg aaaacagcat gctctatgtg ttggagtcac gaagatgtct gcagaagaca 720
ttgagaaagt caacaaagga attggcattg aaaatatcca ttatttaa atgatggctgt 780
ggcatatgaa gacatataaa tgagcctcag aaggaatgca cttgggctaa atatggatat 840
tgtgctgtat ctgtgtttgt gtctgtgtgt gacagcatga agataatgcc tgtggttatg 900
ctgaataaat tcaccagatg ctaaaaaaaaa aaaaaaaaaa aaa 943

<210> 154

<211> 181

<212> PRT

Sequence listing as filed1.txt

<213> Homo sapiens

<400> 154

```

Met Phe Lys Lys Phe Asp Glu Lys Glu Asn Val Ser Asn Cys Ile Gln
 1      5      10      15

Leu Lys Thr Ser Val Ile Lys Gly Ile Lys Asn Gln Leu Ile Glu Gln
 20      25      30

Phe Pro Gly Ile Glu Pro Trp Leu Asn Gln Ile Met Pro Lys Lys Asp
 35      40      45

Pro Val Lys Ile Val Arg Cys His Glu His Ile Glu Ile Leu Thr Val
 50      55      60

Asn Gly Glu Leu Leu Phe Phe Arg Gln Arg Glu Gly Pro Phe Tyr Pro
 65      70      75      80

Thr Leu Arg Leu Leu His Lys Tyr Pro Phe Ile Leu Pro His Gln Gln
 85      90      95

Val Asp Lys Gly Ala Ile Lys Phe Val Leu Ser Gly Ala Asn Ile Met
100      105      110

Cys Pro Gly Leu Thr Ser Pro Gly Ala Lys Leu Tyr Pro Ala Ala Val
115      120      125

Asp Thr Ile Val Ala Ile Met Ala Glu Gly Lys Gln His Ala Leu Cys
130      135      140

Val Gly Val Met Lys Met Ser Ala Glu Asp Ile Glu Lys Val Asn Lys
145      150      155      160

Gly Ile Gly Ile Glu Asn Ile His Tyr Leu Asn Asp Gly Leu Trp His
165      170      175

Met Lys Thr Tyr Lys
180

```

<210> 155

<211> 1771

<212> DNA

<213> Drosophila melanogaster

Sequence listing as filed1.txt

<400> 155
acgccgcatg cacttttttta tctatgatata tatgttttatt atttcattat tgaatcggga 60
aaaccaaacg tttttttttt tttcgtatac aaatccattt gcagtttgta aacttttagcg 120
tgcattcgca tctaatagtg atatgttttc gcttttcaca ggtgatgaac caggacgtga 180
agaaggagaa tcccttgca gtttaggttcc gtgccaaatt ctatcccag gatgtggccg 240
aggagctgat ccaggacatt aactgctgc tgttctacct gcaggtgaag aatgccatac 300
tgaccgacga gatctattgt ccgccagaga catccgtgct gctcgcctcg tacgccgtcc 360
aggcgcgtca tgggtgaccac aataagacca cccacacagc cggctttctg gccaacgatc 420
gcctgctgcc gcagcgcgtc atcgaccagc acaagatgtc caaggacgag tgggagcagt 480
cgattatgac ctggtggcag gagcatcgca gcatgctgcg cgaggatgcc atgatggagt 540
atctgaagat cgcccaagac ctggagatgt acggcggtta ctactttgag atccgcaaca 600
agaagggcac ggatcttttg ctgggcgtag acgactggg tctgaacatt tacgagcagg 660
acgatagggt gacgccgaaa attggtttcc catggtccga gattcgcaac atttcgttct 720
cggagaagaa gttcatcatc aagccgatcg acaagaaggc tccggacttt atgttctttg 780
cgccacgtgt ccgcatcaac aagcgcattc tggccctctg catgggcaac cacgagctgt 840
acatgcgtcg ccgcaagccg gacaccatcg atgtgcagca gatgaaggcg caggcgcgcg 900
aggagaagaa tgccaaacag caggaaacgtg agaagctgca gctggcgctg gccgcacgcg 960
aacgcgctga aaagaagcag caggagtacg aggatcggct aaagcagatg caggaggaca 1020
tggagcgctc gcagcgcgat ctgcttgagg cgcaggacat gatccgccg ctggaggagc 1080
agctgaagca gctgcaggcc gccaaaggat agctggagct gcgccagaag gagctgcagg 1140
cgatgctgca gcgcctcgag gaggccaaga atatggaggc cgtcgagaag ctcaagctcg 1200
aggaggagat catggccaag cagatggagg tgcagcgcag tcaggacgag gtcaacgcca 1260
aggatgagga gacaaagcgt ctgcaggacg aagtggaaga cgcggacgc aagcaggtca 1320
ttgcggctga agccgctgcc gctctgctgg ccgcgtcgac aacgccgcag catcaccacg 1380
tggccgagga tgagaacgag aacgaggagg agctgacgaa cggcgatgcc ggtggcgatg 1440
tgtcgcgcga cctggacacc gacgagcata tcaaggacc catcgaggac agacgcacgc 1500
tggccgagcg caacgaacgc ttgcacgatc agctcaaggc tctgaaacaa gatttggcgc 1560
agtctcgcga cgagacgaaa gagacggcaa acgataagat tcatcgcgag aacgttcgcc 1620
agggacgtga caagtacaag acgctccgcg agattcgtaa gggcaacaca aagcgtcgcg 1680
tcgatcagtt tgagaacatg taaaagctat caaagatcag agatcgatag tgcgcgggaa 1740
agagagaggg agcggtgaga ctccagaaag a 1771

Sequence listing as filed1.txt

<210> 156

<211> 512

<212> PRT

<213> Drosophila melanogaster

<400> 156

Met Asn Gln Asp Val Lys Lys Glu Asn Pro Leu Gln Phe Arg Phe Arg
1 5 10 15

Ala Lys Phe Tyr Pro Glu Asp Val Ala Glu Glu Leu Ile Gln Asp Ile
20 25 30

Thr Leu Arg Leu Phe Tyr Leu Gln Val Lys Asn Ala Ile Leu Thr Asp
35 40 45

Glu Ile Tyr Cys Pro Pro Glu Thr Ser Val Leu Leu Ala Ser Tyr Ala
50 55 60

Val Gln Ala Arg His Gly Asp His Asn Lys Thr Thr His Thr Ala Gly
65 70 75 80

Phe Leu Ala Asn Asp Arg Leu Leu Pro Gln Arg Val Ile Asp Gln His
85 90 95

Lys Met Ser Lys Asp Glu Trp Glu Gln Ser Ile Met Thr Trp Trp Gln
100 105 110

Glu His Arg Ser Met Leu Arg Glu Asp Ala Met Met Glu Tyr Leu Lys
115 120 125

Ile Ala Gln Asp Leu Glu Met Tyr Gly Val Asn Tyr Phe Glu Ile Arg
130 135 140

Asn Lys Lys Gly Thr Asp Leu Trp Leu Gly Val Asp Ala Leu Gly Leu
145 150 155 160

Asn Ile Tyr Glu Gln Asp Asp Arg Leu Thr Pro Lys Ile Gly Phe Pro
165 170 175

Trp Ser Glu Ile Arg Asn Ile Ser Phe Ser Glu Lys Lys Phe Ile Ile
180 185 190

Lys Pro Ile Asp Lys Lys Ala Pro Asp Phe Met Phe Phe Ala Pro Arg
195 200 205

Sequence listing as filed1.txt

Val Arg Ile Asn Lys Arg Ile Leu Ala Leu Cys Met Gly Asn His Glu
210 215 220

Leu Tyr Met Arg Arg Arg Lys Pro Asp Thr Ile Asp Val Gln Gln Met
225 230 235 240

Lys Ala Gln Ala Arg Glu Glu Lys Asn Ala Lys Gln Gln Glu Arg Glu
245 250 255

Lys Leu Gln Leu Ala Leu Ala Ala Arg Glu Arg Ala Glu Lys Lys Gln
260 265 270

Gln Glu Tyr Glu Asp Arg Leu Lys Gln Met Gln Glu Asp Met Glu Arg
275 280 285

Ser Gln Arg Asp Leu Leu Glu Ala Gln Asp Met Ile Arg Arg Leu Glu
290 295 300

Glu Gln Leu Lys Gln Leu Gln Ala Ala Lys Asp Glu Leu Glu Leu Arg
305 310 315 320

Gln Lys Glu Leu Gln Ala Met Leu Gln Arg Leu Glu Glu Ala Lys Asn
325 330 335

Met Glu Ala Val Glu Lys Leu Lys Leu Glu Glu Glu Ile Met Ala Lys
340 345 350

Gln Met Glu Val Gln Arg Ile Gln Asp Glu Val Asn Ala Lys Asp Glu
355 360 365

Glu Thr Lys Arg Leu Gln Asp Glu Val Glu Asp Ala Arg Arg Lys Gln
370 375 380

Val Ile Ala Ala Glu Ala Ala Ala Ala Leu Leu Ala Ala Ser Thr Thr
385 390 395 400

Pro Gln His His His Val Ala Glu Asp Glu Asn Glu Asn Glu Glu Glu
405 410 415

Leu Thr Asn Gly Asp Ala Gly Gly Asp Val Ser Arg Asp Leu Asp Thr
420 425 430

Asp Glu His Ile Lys Asp Pro Ile Glu Asp Arg Arg Thr Leu Ala Glu
435 440 445

Arg Asn Glu Arg Leu His Asp Gln Leu Lys Ala Leu Lys Gln Asp Leu
450 455 460

Sequence listing as filed1.txt

Ala Gln Ser Arg Asp Glu Thr Lys Glu Thr Ala Asn Asp Lys Ile His
465 470 475 480

Arg Glu Asn Val Arg Gln Gly Arg Asp Lys Tyr Lys Thr Leu Arg Glu
485 490 495

Ile Arg Lys Gly Asn Thr Lys Arg Arg Val Asp Gln Phe Glu Asn Met
500 505 510

<210> 157

<211> 2196

<212> DNA

<213> Drosophila melanogaster

<400> 157

gacaacagaa tcgaatcgtc gcttttccgc ttttaaccat cgtgtcgcgt tggtcggttg	60
gttttcccg gtagcttggt gctgctcaag aatatatata tatttcccag acggagattt	120
gcattgaaaa ggcgtaataa ttcaaaagct actgcgcaat ccgttttcgg tgcccaaat	180
ggtcgtcgtc tccgacagcc gcgtccgttt gccgcgttac ggcggagtca gcgtcaaacg	240
gaaaacgcta aatgtgcgcg tcacgacaat ggacgcggaa ctggagttcg ccattcagtc	300
gacgacgacg ggcaagcaat tgtttgacca ggtggtgaag acgatcggcc tgcgagaggt	360
ttggttcttt ggactccagt acaccgactc caagggcgac tccacatgga tcaagctgta	420
caaaaagccc gaatcgccgg ccataaagac aataaaatat ttaaagcgtg taaagaagta	480
tgtggacaaa aagacagccg acagcaatgg agtaaatacat ttagagacga gcgaagagga	540
tgacgacgcc gatgatatga ctggatcaat gccgttttcg acatgggtga tgaaccagga	600
cgtgaagaag gagaatccct tgcagtttag gttccgtgcc aaattctatc ccgaggatgt	660
ggccgaggag ctgatccagg acattacact gcgtctgttc tacctgcagg tgaagaatgc	720
catactgacc gacgagatct attgtccgcc agagacatcc gtgctgctcg cctcgtacgc	780
cgtccaggcg cgtcatggtg accacaataa gaccaccac acagccggct ttctggccaa	840
cgatcgctg ctgccgcagc gcgtcatcga ccagcacaag atgtccaagg acgagtggga	900
gcagtcgatt atgacctggt ggcaggagca tcgcagcatg ctgcgcgagg atgccatgat	960
ggagtatctg aagatcgccc aagacctgga gatgtacggc gttaactact ttgagatccg	1020
caacaagaag ggcacggatc tttggctggg cgtagacgca ctgggtctga acatttacga	1080
gcaggacgat aggttgacgc cgaaaattgg tttcccatgg tccgagattc gcaacatttc	1140

Sequence listing as filed1.txt

gttctcggag aagaagttca tcatcaagcc gatcgacaag aaggctccgg actttatgtt 1200
ctttgcgcca cgtgtccgca tcaacaagcg cattctggcc ctctgcatgg gcaaccacga 1260
gctgtacatg cgctcgccgca agccggacac catcgatgtg cagcagatga aggcgaggc 1320
gcgcgaggag aagaatgcc aacagcagga acgtgagaag ctgcagctgg cgctggccgc 1380
acgcgaacgc gctgaaaaga agcagcagga gtacgaggat cggctaaagc agatgcagga 1440
ggacatggag cgttcgcagc gcgatctgct tgaggcgag gacatgatcc gccggctgga 1500
ggagcagctg aagcagctgc aggccgcaa ggatgagctg gagctgcgcc agaaggagct 1560
gcaggcgatg ctgcagcgcc tcgaggaggc caagaatatg gaggccgtcg agaagctcaa 1620
gctcgaggag gagatcatgg ccaagcagat ggagggtgag cgcattcagg acgaggtaa 1680
cgccaaggat gaggagacaa agcgtctgca ggacgaagtg gaagacgccc gacgcaagca 1740
ggtcattgag gctgaagccg ctgccgctct gctggccgag tcgacaacgc cgcagcatca 1800
ccacgtggcc gaggatgaga acgagaacga ggaggagctg acgaacggcg atgccggtgg 1860
cgatgtgtcg cgcgacctgg acaccgacga gcatatcaag gaccccatcg aggacagacg 1920
cacgctggcc gagcgcaacg aacgcttgca cgatcagctc aaggctctga aacaagattt 1980
ggcgagctct cgcgacgaga cgaaagagac ggcaaacgat aagattcatc gcgagaacgt 2040
tcgccaggga cgtgacaagt acaagacgct ccgcgagatt cgtaaggga acacaaagcg 2100
tcgcgtcgat cagtttgaga acatgtaaaa gctatcaaag atcagagatc gatagtgcgc 2160
gggaaagaga gaggagcgg tgagactcca gaaaga 2196

<210> 158

<211> 649

<212> PRT

<213> Drosophila melanogaster

<400> 158

Met Val Val Val Ser Asp Ser Arg Val Arg Leu Pro Arg Tyr Gly Gly
1 5 10 15

Val Ser Val Lys Arg Lys Thr Leu Asn Val Arg Val Thr Thr Met Asp
20 25 30

Ala Glu Leu Glu Phe Ala Ile Gln Ser Thr Thr Thr Gly Lys Gln Leu
35 40 45

Phe Asp Gln Val Val Lys Thr Ile Gly Leu Arg Glu Val Trp Phe Phe
50 55 60

Sequence listing as filed1.txt

Gly Leu Gln Tyr Thr Asp Ser Lys Gly Asp Ser Thr Trp Ile Lys Leu
65 70 75 80

Tyr Lys Lys Pro Glu Ser Pro Ala Ile Lys Thr Ile Lys Tyr Leu Lys
85 90 95

Arg Val Lys Lys Tyr Val Asp Lys Lys Thr Ala Asp Ser Asn Gly Val
100 105 110

Asn His Leu Glu Thr Ser Glu Glu Asp Asp Asp Ala Asp Asp Met Thr
115 120 125

Gly Ser Met Pro Phe Ser Thr Trp Val Met Asn Gln Asp Val Lys Lys
130 135 140

Glu Asn Pro Leu Gln Phe Arg Phe Arg Ala Lys Phe Tyr Pro Glu Asp
145 150 155 160

Val Ala Glu Glu Leu Ile Gln Asp Ile Thr Leu Arg Leu Phe Tyr Leu
165 170 175

Gln Val Lys Asn Ala Ile Leu Thr Asp Glu Ile Tyr Cys Pro Pro Glu
180 185 190

Thr Ser Val Leu Leu Ala Ser Tyr Ala Val Gln Ala Arg His Gly Asp
195 200 205

His Asn Lys Thr Thr His Thr Ala Gly Phe Leu Ala Asn Asp Arg Leu
210 215 220

Leu Pro Gln Arg Val Ile Asp Gln His Lys Met Ser Lys Asp Glu Trp
225 230 235 240

Glu Gln Ser Ile Met Thr Trp Trp Gln Glu His Arg Ser Met Leu Arg
245 250 255

Glu Asp Ala Met Met Glu Tyr Leu Lys Ile Ala Gln Asp Leu Glu Met
260 265 270

Tyr Gly Val Asn Tyr Phe Glu Ile Arg Asn Lys Lys Gly Thr Asp Leu
275 280 285

Trp Leu Gly Val Asp Ala Leu Gly Leu Asn Ile Tyr Glu Gln Asp Asp
290 295 300

Arg Leu Thr Pro Lys Ile Gly Phe Pro Trp Ser Glu Ile Arg Asn Ile
Page 162

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305         310         315         320
sequence listing as filed.txt

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Pro Asp Phe Met Phe Phe Ala Pro Arg Val Arg Ile Asn Lys Arg Ile
340 345 350

Leu Ala Leu Cys Met Gly Asn His Glu Leu Tyr Met Arg Arg Arg Lys
355 360 365

Pro Asp Thr Ile Asp Val Gln Gln Met Lys Ala Gln Ala Arg Glu Glu
370 375 380

Lys Asn Ala Lys Gln Gln Glu Arg Glu Lys Leu Gln Leu Ala Leu Ala
385 390 395 400

Ala Arg Glu Arg Ala Glu Lys Lys Gln Gln Glu Tyr Glu Asp Arg Leu
405 410 415

Lys Gln Met Gln Glu Asp Met Glu Arg Ser Gln Arg Asp Leu Leu Glu
420 425 430

Ala Gln Asp Met Ile Arg Arg Leu Glu Glu Gln Leu Lys Gln Leu Gln
435 440 445

Ala Ala Lys Asp Glu Leu Glu Leu Arg Gln Lys Glu Leu Gln Ala Met
450 455 460

Leu Gln Arg Leu Glu Glu Ala Lys Asn Met Glu Ala Val Glu Lys Leu
465 470 475 480

Lys Leu Glu Glu Glu Ile Met Ala Lys Gln Met Glu Val Gln Arg Ile
485 490 495

Gln Asp Glu Val Asn Ala Lys Asp Glu Glu Thr Lys Arg Leu Gln Asp
500 505 510

Glu Val Glu Asp Ala Arg Arg Lys Gln Val Ile Ala Ala Glu Ala Ala
515 520 525

Ala Ala Leu Leu Ala Ala Ser Thr Thr Pro Gln His His His Val Ala
530 535 540

Glu Asp Glu Asn Glu Asn Glu Glu Glu Leu Thr Asn Gly Asp Ala Gly
545 550 555 560

Sequence listing as filed1.txt

Gly Asp Val Ser Arg Asp Leu Asp Thr Asp Glu His Ile Lys Asp Pro
565 570 575

Ile Glu Asp Arg Arg Thr Leu Ala Glu Arg Asn Glu Arg Leu His Asp
580 585 590

Gln Leu Lys Ala Leu Lys Gln Asp Leu Ala Gln Ser Arg Asp Glu Thr
595 600 605

Lys Glu Thr Ala Asn Asp Lys Ile His Arg Glu Asn Val Arg Gln Gly
610 615 620

Arg Asp Lys Tyr Lys Thr Leu Arg Glu Ile Arg Lys Gly Asn Thr Lys
625 630 635 640

Arg Arg Val Asp Gln Phe Glu Asn Met
645

<210> 159

<211> 2097

<212> DNA

<213> Drosophila melanogaster

<400> 159

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cgctgctgctc gcctcgtagc ccgtccaggc gcgtcatggt gaccacaata agaccacca	720
cacagccggc tttctggcca acgatcgctt gctgccgcag cgcgtcatcg accagcacia	780
gatgtccaag gacgagtggg agcagtcgat tatgacctgg tggcaggagc atcgcagcat	840

Sequence listing as filed1.txt

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<210> 160

<211> 640

<212> PRT

<213> Drosophila melanogaster

<400> 160

Met Gly Val Asn Phe Leu Leu Phe Phe Phe Ser Ile Trp Leu Leu Asn
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 20 25 30

Sequence listing as filed1.txt

Thr Thr Thr Gly Lys Gln Leu Phe Asp Gln Val Val Lys Thr Ile Gly
35 40 45

Leu Arg Glu Val Trp Phe Phe Gly Leu Gln Tyr Thr Asp Ser Lys Gly
50 55 60

Asp Ser Thr Trp Ile Lys Leu Tyr Lys Lys Pro Glu Ser Pro Ala Ile
65 70 75 80

Lys Thr Ile Lys Tyr Leu Lys Arg Val Lys Lys Tyr Val Asp Lys Lys
85 90 95

Thr Ala Asp Ser Asn Gly Val Asn His Leu Glu Thr Ser Glu Glu Asp
100 105 110

Asp Asp Ala Asp Asp Met Thr Gly Ser Met Pro Phe Ser Thr Trp Val
115 120 125

Met Asn Gln Asp Val Lys Lys Glu Asn Pro Leu Gln Phe Arg Phe Arg
130 135 140

Ala Lys Phe Tyr Pro Glu Asp Val Ala Glu Glu Leu Ile Gln Asp Ile
145 150 155 160

Thr Leu Arg Leu Phe Tyr Leu Gln Val Lys Asn Ala Ile Leu Thr Asp
165 170 175

Glu Ile Tyr Cys Pro Pro Glu Thr Ser Val Leu Leu Ala Ser Tyr Ala
180 185 190

Val Gln Ala Arg His Gly Asp His Asn Lys Thr Thr His Thr Ala Gly
195 200 205

Phe Leu Ala Asn Asp Arg Leu Leu Pro Gln Arg Val Ile Asp Gln His
210 215 220

Lys Met Ser Lys Asp Glu Trp Glu Gln Ser Ile Met Thr Trp Trp Gln
225 230 235 240

Glu His Arg Ser Met Leu Arg Glu Asp Ala Met Met Glu Tyr Leu Lys
245 250 255

Ile Ala Gln Asp Leu Glu Met Tyr Gly Val Asn Tyr Phe Glu Ile Arg
260 265 270

Asn Lys Lys Gly Thr Asp Leu Trp Leu Gly Val Asp Ala Leu Gly Leu
275 280 285

Sequence listing as filed1.txt

Asn Ile Tyr Glu Gln Asp Asp Arg Leu Thr Pro Lys Ile Gly Phe Pro
290 295 300

Trp Ser Glu Ile Arg Asn Ile Ser Phe Ser Glu Lys Lys Phe Ile Ile
305 310 315 320

Lys Pro Ile Asp Lys Lys Ala Pro Asp Phe Met Phe Phe Ala Pro Arg
325 330 335

Val Arg Ile Asn Lys Arg Ile Leu Ala Leu Cys Met Gly Asn His Glu
340 345 350

Leu Tyr Met Arg Arg Arg Lys Pro Asp Thr Ile Asp Val Gln Gln Met
355 360 365

Lys Ala Gln Ala Arg Glu Glu Lys Asn Ala Lys Gln Gln Glu Arg Glu
370 375 380

Lys Leu Gln Leu Ala Leu Ala Ala Arg Glu Arg Ala Glu Lys Lys Gln
385 390 395 400

Gln Glu Tyr Glu Asp Arg Leu Lys Gln Met Gln Glu Asp Met Glu Arg
405 410 415

Ser Gln Arg Asp Leu Leu Glu Ala Gln Asp Met Ile Arg Arg Leu Glu
420 425 430

Glu Gln Leu Lys Gln Leu Gln Ala Ala Lys Asp Glu Leu Glu Leu Arg
435 440 445

Gln Lys Glu Leu Gln Ala Met Leu Gln Arg Leu Glu Glu Ala Lys Asn
450 455 460

Met Glu Ala Val Glu Lys Leu Lys Leu Glu Glu Glu Ile Met Ala Lys
465 470 475 480

Gln Met Glu Val Gln Arg Ile Gln Asp Glu Val Asn Ala Lys Asp Glu
485 490 495

Glu Thr Lys Arg Leu Gln Asp Glu Val Glu Asp Ala Arg Arg Lys Gln
500 505 510

Val Ile Ala Ala Glu Ala Ala Ala Ala Leu Leu Ala Ala Ser Thr Thr
515 520 525

Pro Gln His His His Val Ala Glu Asp Glu Asn Glu Asn Glu Glu Glu
530 535 540

Sequence listing as filed1.txt

Leu Thr Asn Gly Asp Ala Gly Gly Asp Val Ser Arg Asp Leu Asp Thr
545 550 555 560

Asp Glu His Ile Lys Asp Pro Ile Glu Asp Arg Arg Thr Leu Ala Glu
565 570 575

Arg Asn Glu Arg Leu His Asp Gln Leu Lys Ala Leu Lys Gln Asp Leu
580 585 590

Ala Gln Ser Arg Asp Glu Thr Lys Glu Thr Ala Asn Asp Lys Ile His
595 600 605

Arg Glu Asn Val Arg Gln Gly Arg Asp Lys Tyr Lys Thr Leu Arg Glu
610 615 620

Ile Arg Lys Gly Asn Thr Lys Arg Arg Val Asp Gln Phe Glu Asn Met
625 630 635 640

<210> 161

<211> 2004

<212> DNA

<213> Drosophila melanogaster

<400> 161

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gccgcagcgc gtcatcgacc agcacaagat gtccaaggac gagtgggagc agtcgattat      720
gacctggtgg caggagcatc gcagcatgct gcgcgaggat gccatgatgg agtatctgaa      780

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Sequence listing as filed1.txt

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gttgacgccg aaaattgggt tcccatgggt cgagattcgc aacatttcgt tctcggagaa	960
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<210> 162

<211> 578

<212> PRT

<213> Drosophila melanogaster

<400> 162

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Leu	Glu	Phe	Ala	Ile	Gln	Ser	Thr	Thr	Gly	Lys	Gln	Leu	Phe	Asp
			20					25				30		

Sequence listing as filed1.txt

Gln Val Val Lys Thr Ile Gly Leu Arg Glu Val Trp Phe Phe Gly Leu
35 40 45

Gln Tyr Thr Asp Ser Lys Gly Asp Ser Thr Trp Ile Lys Leu Tyr Lys
50 55 60

Lys Val Met Asn Gln Asp Val Lys Lys Glu Asn Pro Leu Gln Phe Arg
65 70 75 80

Phe Arg Ala Lys Phe Tyr Pro Glu Asp Val Ala Glu Glu Leu Ile Gln
85 90 95

Asp Ile Thr Leu Arg Leu Phe Tyr Leu Gln Val Lys Asn Ala Ile Leu
100 105 110

Thr Asp Glu Ile Tyr Cys Pro Pro Glu Thr Ser Val Leu Leu Ala Ser
115 120 125

Tyr Ala Val Gln Ala Arg His Gly Asp His Asn Lys Thr Thr His Thr
130 135 140

Ala Gly Phe Leu Ala Asn Asp Arg Leu Leu Pro Gln Arg Val Ile Asp
145 150 155 160

Gln His Lys Met Ser Lys Asp Glu Trp Glu Gln Ser Ile Met Thr Trp
165 170 175

Trp Gln Glu His Arg Ser Met Leu Arg Glu Asp Ala Met Met Glu Tyr
180 185 190

Leu Lys Ile Ala Gln Asp Leu Glu Met Tyr Gly Val Asn Tyr Phe Glu
195 200 205

Ile Arg Asn Lys Lys Gly Thr Asp Leu Trp Leu Gly Val Asp Ala Leu
210 215 220

Gly Leu Asn Ile Tyr Glu Gln Asp Asp Arg Leu Thr Pro Lys Ile Gly
225 230 235 240

Phe Pro Trp Ser Glu Ile Arg Asn Ile Ser Phe Ser Glu Lys Lys Phe
245 250 255

Ile Ile Lys Pro Ile Asp Lys Lys Ala Pro Asp Phe Met Phe Phe Ala
260 265 270

Pro Arg Val Arg Ile Asn Lys Arg Ile Leu Ala Leu Cys Met Gly Asn
275 280 285

Sequence listing as filed1.txt

His Glu Leu Tyr Met Arg Arg Arg Lys Pro Asp Thr Ile Asp Val Gln
290 295 300

Gln Met Lys Ala Gln Ala Arg Glu Glu Lys Asn Ala Lys Gln Gln Glu
305 310 315 320

Arg Glu Lys Leu Gln Leu Ala Leu Ala Ala Arg Glu Arg Ala Glu Lys
325 330 335

Lys Gln Gln Glu Tyr Glu Asp Arg Leu Lys Gln Met Gln Glu Asp Met
340 345 350

Glu Arg Ser Gln Arg Asp Leu Leu Glu Ala Gln Asp Met Ile Arg Arg
355 360 365

Leu Glu Glu Gln Leu Lys Gln Leu Gln Ala Ala Lys Asp Glu Leu Glu
370 375 380

Leu Arg Gln Lys Glu Leu Gln Ala Met Leu Gln Arg Leu Glu Glu Ala
385 390 395 400

Lys Asn Met Glu Ala Val Glu Lys Leu Lys Leu Glu Glu Glu Ile Met
405 410 415

Ala Lys Gln Met Glu Val Gln Arg Ile Gln Asp Glu Val Asn Ala Lys
420 425 430

Asp Glu Glu Thr Lys Arg Leu Gln Asp Glu Val Glu Asp Ala Arg Arg
435 440 445

Lys Gln Val Ile Ala Ala Glu Ala Ala Ala Ala Leu Leu Ala Ala Ser
450 455 460

Thr Thr Pro Gln His His His Val Ala Glu Asp Glu Asn Glu Asn Glu
465 470 475 480

Glu Glu Leu Thr Asn Gly Asp Ala Gly Gly Asp Val Ser Arg Asp Leu
485 490 495

Asp Thr Asp Glu His Ile Lys Asp Pro Ile Glu Asp Arg Arg Thr Leu
500 505 510

Ala Glu Arg Asn Glu Arg Leu His Asp Gln Leu Lys Ala Leu Lys Gln
515 520 525

Asp Leu Ala Gln Ser Arg Asp Glu Thr Lys Glu Thr Ala Asn Asp Lys
530 535 540

Sequence listing as filed1.txt

Ile His Arg Glu Asn Val Arg Gln Gly Arg Asp Lys Tyr Lys Thr Leu
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Asn Met

<210> 163

<211> 3879

<212> DNA

<213> Homo sapiens

<400> 163

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Sequence listing as filed1.txt

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Sequence listing as filed1.txt

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ccccctagct tagagcctcc ctcaattccc cctggccacc acccccact ctgtgcctga 3600
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cttaccctta gggaggctgg gggaaaaggt tagattttgt attcaggggt tttttgtgta 3780
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cagtgccaat aaaatttagg tgacttcaaa aaaaaaaaaa 3879

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<210> 164

<211> 577

<212> PRT

<213> Homo sapiens

<400> 164

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Met Pro Lys Thr Ile Ser Val Arg Val Thr Thr Met Asp Ala Glu Leu
1           5           10           15

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```

Glu Phe Ala Ile Gln Pro Asn Thr Thr Gly Lys Gln Leu Phe Asp Gln
          20           25           30

```

```

Val Val Lys Thr Ile Gly Leu Arg Glu Val Trp Phe Phe Gly Leu Gln
        35           40           45

```

```

Tyr Gln Asp Thr Lys Gly Phe Ser Thr Trp Leu Lys Leu Asn Lys Lys
50           55           60

```

```

Val Thr Ala Gln Asp Val Arg Lys Glu Ser Pro Leu Leu Phe Lys Phe
65           70           75           80

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Arg Ala Lys Phe Tyr Pro Glu Asp Val Ser Glu Glu Leu Ile Gln Asp
                          Page 174

```

Sequence listing as filed1.txt

85

90

95

Ile Thr Gln Arg Leu Phe Phe Leu Gln Val Lys Glu Gly Ile Leu Asn
100 105 110

Asp Asp Ile Tyr Cys Pro Pro Glu Thr Ala Val Leu Leu Ala Ser Tyr
115 120 125

Ala Val Gln Ser Lys Tyr Gly Asp Phe Asn Lys Glu Val His Lys Ser
130 135 140

Gly Tyr Leu Ala Gly Asp Lys Leu Leu Pro Gln Arg Val Leu Glu Gln
145 150 155 160

His Lys Leu Asn Lys Asp Gln Trp Glu Glu Arg Ile Gln Val Trp His
165 170 175

Glu Glu His Arg Gly Met Leu Arg Glu Asp Ala Val Leu Glu Tyr Leu
180 185 190

Lys Ile Ala Gln Asp Leu Glu Met Tyr Gly Val Asn Tyr Phe Ser Ile
195 200 205

Lys Asn Lys Lys Gly Ser Glu Leu Trp Leu Gly Val Asp Ala Leu Gly
210 215 220

Leu Asn Ile Tyr Glu Gln Asn Asp Arg Leu Thr Pro Lys Ile Gly Phe
225 230 235 240

Pro Trp Ser Glu Ile Arg Asn Ile Ser Phe Asn Asp Lys Lys Phe Val
245 250 255

Ile Lys Pro Ile Asp Lys Lys Ala Pro Asp Phe Val Phe Tyr Ala Pro
260 265 270

Arg Leu Arg Ile Asn Lys Arg Ile Leu Ala Leu Cys Met Gly Asn His
275 280 285

Glu Leu Tyr Met Arg Arg Arg Lys Pro Asp Thr Ile Glu Val Gln Gln
290 295 300

Met Lys Ala Gln Ala Arg Glu Glu Lys His Gln Lys Gln Met Glu Arg
305 310 315 320

Ala Met Leu Glu Asn Glu Lys Lys Lys Arg Glu Met Ala Glu Lys Glu
325 330 335

Sequence listing as filed1.txt

Lys Glu Lys Ile Glu Arg Glu Lys Glu Glu Leu Met Glu Arg Leu Lys
340 345 350

Gln Ile Glu Glu Gln Thr Lys Lys Ala Gln Gln Glu Leu Glu Glu Gln
355 360 365

Thr Arg Arg Ala Leu Glu Leu Glu Gln Glu Arg Lys Arg Ala Gln Ser
370 375 380

Glu Ala Glu Lys Leu Ala Lys Glu Arg Gln Glu Ala Glu Glu Ala Lys
385 390 395 400

Glu Ala Leu Leu Gln Ala Ser Arg Asp Gln Lys Lys Thr Gln Glu Gln
405 410 415

Leu Ala Leu Glu Met Ala Glu Leu Thr Ala Arg Ile Ser Gln Leu Glu
420 425 430

Met Ala Arg Gln Lys Lys Glu Ser Glu Ala Val Glu Trp Gln Gln Lys
435 440 445

Ala Gln Met Val Gln Glu Asp Leu Glu Lys Thr Arg Ala Glu Leu Lys
450 455 460

Thr Ala Met Ser Thr Pro His Val Ala Glu Pro Ala Glu Asn Glu Gln
465 470 475 480

Asp Glu Gln Asp Glu Asn Gly Ala Glu Ala Ser Ala Asp Leu Arg Ala
485 490 495

Asp Ala Met Ala Lys Asp Arg Ser Glu Glu Glu Arg Thr Thr Glu Ala
500 505 510

Glu Lys Asn Glu Arg Val Gln Lys His Leu Lys Ala Leu Thr Ser Glu
515 520 525

Leu Ala Asn Ala Arg Asp Glu Ser Lys Lys Thr Ala Asn Asp Met Ile
530 535 540

His Ala Glu Asn Met Arg Leu Gly Arg Asp Lys Tyr Lys Thr Leu Arg
545 550 555 560

Gln Ile Arg Gln Gly Asn Thr Lys Gln Arg Ile Asp Glu Phe Glu Ser
565 570 575

Met

Sequence listing as filed1.txt

<210> 165

<211> 1362

<212> DNA

<213> *Drosophila melanogaster*

<400> 165

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agcaatatca gcagtaacaa cagcagcagc agcgacgaag actcagacat gtttggacca      180
ccccgctgct ccccgcccat cggctatcac catcaccgtt cccgtgtgcc catgatctcg      240
ccaaagctgc ggcagcgcga ggagcgcaag cggatcctcc agctctgcgc ccacaagatg      300
gagaggatca aggactcggg ggcgaacctg cggcgcagcg tctgcatcaa caacacctac      360
tgccgcctga atgacgaact gcggcgcgag aagcagatgc gctacctcca gaatctgccc      420
agaaccagcg acagcggcgc aagcaccgaa ctggcgcgtg agaattctctt ccagccgaac      480
atggacgacg ccaagccggc cggcaatagc actagcaata atatcaacgc caacggcaag      540
ccttcattct cttttggcga tgcctttggc tcctcaaacg gatcatcgtc gggtcgcggc      600
ggaatttgct ccctggagaa tcaaccgccc gagcgtcagc agttggggac gcccgtgggt      660
gcctccgctc ccgaggcggc caattcggcg cccctttccg tttcgggctc ggcatcgga      720
cgcgatgaata accgaaaacg ccacctgtcc agctgcaact tggatcaacga tctggaaata      780
ctggacaggg agctgagcgc catcaatgca cccatgctgc taatcgatcc agagattacc      840
caaggagccg aacagctgga gaaggccgcc ttgtccgcca gcaggaagag attgaggagc      900
aatagcggca gcgaggacga aagtgatcgc ctggtgcgcg aggctctgtc ccagttctac      960
ataccgccac agcgccctcat ctccgccatt gaggagtgtc ccctggatgt ggttggcttg     1020
ggtatgggaa tgaatgtgaa tgtgaatgtg ggaggaatta gtggaatcgg tggcatcgga     1080
ggagctgcag gcgctggcgt cgaaatgccg ggaggcaaac ggatgaagct gaatgaccat     1140
caccatctca atcaccatca ccatttgcac catcatctgg agctggtcga tttcgacatg     1200
aaccaaaacc aaaaggattt cgaggatgat atggacgcct tgaggctggg aacggcgaca     1260
ccgccgagcg gcgccagcag cgattcttgc ggacaggcgg cgatgatgag cgagtcggcc     1320
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<210> 166

<211> 434

Sequence listing as filed1.txt

<212> PRT

<213> Drosophila melanogaster

<400> 166

Met Thr Leu Pro Thr Asn Thr His Ala Ser Ala Asn Asp Gly Gly Ser
1 5 10 15

Gly Asn Asn Asn His Ser Asn Ile Ser Ser Asn Asn Ser Ser Ser Ser
20 25 30

Asp Glu Asp Ser Asp Met Phe Gly Pro Pro Arg Cys Ser Pro Pro Ile
35 40 45

Gly Tyr His His His Arg Ser Arg Val Pro Met Ile Ser Pro Lys Leu
50 55 60

Arg Gln Arg Glu Glu Arg Lys Arg Ile Leu Gln Leu Cys Ala His Lys
65 70 75 80

Met Glu Arg Ile Lys Asp Ser Glu Ala Asn Leu Arg Arg Ser Val Cys
85 90 95

Ile Asn Asn Thr Tyr Cys Arg Leu Asn Asp Glu Leu Arg Arg Glu Lys
100 105 110

Gln Met Arg Tyr Leu Gln Asn Leu Pro Arg Thr Ser Asp Ser Gly Ala
115 120 125

Ser Thr Glu Leu Ala Arg Glu Asn Leu Phe Gln Pro Asn Met Asp Asp
130 135 140

Ala Lys Pro Ala Gly Asn Ser Thr Ser Asn Asn Ile Asn Ala Asn Gly
145 150 155 160

Lys Pro Ser Ser Ser Phe Gly Asp Ala Phe Gly Ser Ser Asn Gly Ser
165 170 175

Ser Ser Gly Arg Gly Gly Ile Cys Ser Leu Glu Asn Gln Pro Pro Glu
180 185 190

Arg Gln Gln Leu Gly Thr Pro Ala Gly Ala Ser Ala Pro Glu Ala Ala
195 200 205

Asn Ser Ala Pro Leu Ser Val Ser Gly Ser Ala Ser Glu Arg Val Asn
210 215 220

Sequence listing as filed1.txt

Asn Arg Lys Arg His Leu Ser Ser Cys Asn Leu Val Asn Asp Leu Glu
 225 230 235 240
 Ile Leu Asp Arg Glu Leu Ser Ala Ile Asn Ala Pro Met Leu Leu Ile
 245 250 255
 Asp Pro Glu Ile Thr Gln Gly Ala Glu Gln Leu Glu Lys Ala Ala Leu
 260 265 270
 Ser Ala Ser Arg Lys Arg Leu Arg Ser Asn Ser Gly Ser Glu Asp Glu
 275 280 285
 Ser Asp Arg Leu Val Arg Glu Ala Leu Ser Gln Phe Tyr Ile Pro Pro
 290 295 300
 Gln Arg Leu Ile Ser Ala Ile Glu Glu Cys Pro Leu Asp Val Val Gly
 305 310 315 320
 Leu Gly Met Gly Met Asn Val Asn Val Asn Val Gly Gly Ile Ser Gly
 325 330 335
 Ile Gly Gly Ile Gly Gly Ala Ala Gly Ala Gly Val Glu Met Pro Gly
 340 345 350
 Gly Lys Arg Met Lys Leu Asn Asp His His His Leu Asn His His His
 355 360 365
 His Leu His His His Leu Glu Leu Val Asp Phe Asp Met Asn Gln Asn
 370 375 380
 Gln Lys Asp Phe Glu Val Ile Met Asp Ala Leu Arg Leu Gly Thr Ala
 385 390 395 400
 Thr Pro Pro Ser Gly Ala Ser Ser Asp Ser Cys Gly Gln Ala Ala Met
 405 410 415
 Met Ser Glu Ser Ala Ser Val Phe His Asn Leu Val Val Thr Ser Leu
 420 425 430
 Glu Thr

<210> 167

<211> 1556

<212> DNA

Sequence listing as filed1.txt

<213> Drosophila melanogaster

<400> 167

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aagccgcagc gccaacgagt aatgaacagt ccacggccag gtcgtactat tcaggcgaac	180
gcacctcgca atcgactgca atcaaagtgc aatagctcaa tcaattgatt cgttttgctc	240
aacaaaaaac aaaatctatt cccaaatcgg tgcgatagtt gccaaaatat aaaaactaca	300
ctacgctaaa aaaaaaaca tacactcaca cactggcgta caagacaaca aaagagaaga	360
agaagagcag acgccagata taaaaagccc ccaaaagaat tggaaataag accatacccc	420
tccttctccc ttgaaaaggg accttaaac taggcgacac cgaataattg aactcaagta	480
aaaaaccggg aaaagagaaa aacactttca acaaaatadc tagaagcctt gttatcgatt	540
ttgttccggg ttttttttgt gtgagtggtg gttgtgtgaa gcgcgcccgc ggggtgtgtg	600
gtgagtggtg gtgtggctct cggcgcgtta taaaaaaca caacaattcg ttgaaaaga	660
aaaaataaag tagaggaggc ggaagaagaa gaggaatctg ctgcgaccgc ggtcaatcgc	720
ggatcgtggt cgatttatcg aattaatcgc cccgaacaaa aaaaacaccg tacaaggact	780
tgcactatct ccaatgattt cgctgctgca aatgaaattc cgtgcgcttt tgttgttgct	840
atcaaaagta tggacatgca tttgtttcat gttcaatcgc caagtgcgag cttttatcca	900
gtatcaaccg gttaaatacg aactcttccc gttgtcacc gtctcgcggc accgcctgag	960
cctgggtgcag cgcaagacc tcgttctgga cctggacgaa acgctaattc actcccatca	1020
caatgcgatg ccccggaata cgggtgaagc gggcacgccg cacgatttca ctgtcaaagt	1080
gaccatcgat cggaatccag tgcgcttttt cgtgcacaag cgaccgcatg tggactactt	1140
cctggacgtg gtctcgagc ggtacgatct ggtggtcttc acggccagca tggagattta	1200
cggagcggcg gtggcagaca agctggacaa cggacgaaac atcctccgga ggcgatacta	1260
cagacagcac tgcacgccc actacggatc ctacaccaa gacctgtcgg ccatctgcag	1320
tgacctaaat aggatattta tcatcgacaa ttcgcccggc gcctatcgct gttttcccaa	1380
caacgccata cccatcaaga gttggttctc ggaccgatg gacacggcgc tgctgtcgct	1440
gctgcccatt ctggatgcgc tgaggttcac gaacgacgtg agatcgggtg tgtcgaggaa	1500
cttgcacctg caccgcctct ggtagcaggt gggccgcctg tcgctagttt agttta	1556

<210> 168

<211> 243

<212> PRT

Sequence listing as filed1.txt

<213> Drosophila melanogaster

<400> 168

Met Ile Ser Leu Leu Gln Met Lys Phe Arg Ala Leu Leu Leu Leu Leu
1 5 10 15

Ser Lys Val Trp Thr Cys Ile Cys Phe Met Phe Asn Arg Gln Val Arg
20 25 30

Ala Phe Ile Gln Tyr Gln Pro Val Lys Tyr Glu Leu Phe Pro Leu Ser
35 40 45

Pro Val Ser Arg His Arg Leu Ser Leu Val Gln Arg Lys Thr Leu Val
50 55 60

Leu Asp Leu Asp Glu Thr Leu Ile His Ser His His Asn Ala Met Pro
65 70 75 80

Arg Asn Thr Val Lys Pro Gly Thr Pro His Asp Phe Thr Val Lys Val
85 90 95

Thr Ile Asp Arg Asn Pro Val Arg Phe Phe Val His Lys Arg Pro His
100 105 110

Val Asp Tyr Phe Leu Asp Val Val Ser Gln Trp Tyr Asp Leu Val Val
115 120 125

Phe Thr Ala Ser Met Glu Ile Tyr Gly Ala Ala Val Ala Asp Lys Leu
130 135 140

Asp Asn Gly Arg Asn Ile Leu Arg Arg Arg Tyr Tyr Arg Gln His Cys
145 150 155 160

Thr Pro Asp Tyr Gly Ser Tyr Thr Lys Asp Leu Ser Ala Ile Cys Ser
165 170 175

Asp Leu Asn Arg Ile Phe Ile Ile Asp Asn Ser Pro Gly Ala Tyr Arg
180 185 190

Cys Phe Pro Asn Asn Ala Ile Pro Ile Lys Ser Trp Phe Ser Asp Pro
195 200 205

Met Asp Thr Ala Leu Leu Ser Leu Leu Pro Met Leu Asp Ala Leu Arg
210 215 220

Sequence listing as filed1.txt

Phe Thr Asn Asp Val Arg Ser Val Leu Ser Arg Asn Leu His Leu His
225 230 235 240

Arg Leu Trp

<210> 169

<211> 1356

<212> DNA

<213> Homo sapiens

<400> 169

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cagatccgca cggttaattca gtaccaaact gttcgatatg atatcctccc cttatctcct      180
gtgtcccgga atcggctagc ccagggtgaag aggaagatcc tggtgctgga tctggatgag      240
acacttattc actcccacca tgatggggtc ctgaggccca cagtccggcc tggtagcct      300
cctgacttca tcctcaaggt ggtaatagac aaacatcctg tccggttttt tgtacataag      360
aggcccatg tggatttctt cctggaagtg gtgagccagt ggtacgagct ggtggtgttt      420
acagcaagca tggagatcta tggctctgct gtggcagata aactggacaa tagcagaagc      480
attcttaaga ggaatatta cagacagcac tgcactttgg agttgggcag ctacatcaag      540
gacctctctg tgggccacag tgacctctcc agcattgtga tcctggataa ctcccaggg      600
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gacacagccc ttctcaacct gctcccaatg ctggatgccc tcagggtcac cgctgatgtt      720
cgttccgtgc tgagccgaaa ccttcaccaa catcggctct ggtgacagct gctccccctc      780
cacctgagtt ggggtggggg ggaaagggag ggcgagccct tgggatgccg tctgatgcc      840
tgtccaatgt gaggactgcc tgggcagggt ctgcccctcc caccctctc tgcctggga      900
gccctacact ccacttggag tctggatgga cacatgggcc aggggctctg aagcagcctc      960
actcttaact tcgtgttcac actccatgga aaccccagac tgggacacag gcggaagcct     1020
aggagagccg aatcagtgtt tgtgaagagg caggactggc cagagtgaca gacatacgg      1080
gatccaggag gctcaaagag aagccaagtc agctttgttg tgatttgatt ttttttaaaa     1140
aactcttgta caaaactgat ctaattcttc actcctgctc caagggctgg gctgtgggtg     1200
ggatactggg attttgggcc actggatttt ccctaaattt gtccccctt tactctcct      1260
ctatctttct ctccttagac tccctcagac ctgtaaccag ctttgtgtct tttttcctt      1320

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Sequence listing as filed1.txt

tctctctttt aaaccatgca ttataacttt gaaacc

1356

<210> 170

<211> 244

<212> PRT

<213> Homo sapiens

<400> 170

Met Met Arg Thr Gln Cys Leu Leu Gly Leu Arg Ala Phe Val Ala Phe
1 5 10 15

Ala Ala Lys Leu Trp Ser Phe Phe Ile Tyr Leu Leu Arg Arg Gln Ile
20 25 30

Arg Thr Val Ile Gln Tyr Gln Thr Val Arg Tyr Asp Ile Leu Pro Leu
35 40 45

Ser Pro Val Ser Arg Asn Arg Leu Ala Gln Val Lys Arg Lys Ile Leu
50 55 60

Val Leu Asp Leu Asp Glu Thr Leu Ile His Ser His His Asp Gly Val
65 70 75 80

Leu Arg Pro Thr Val Arg Pro Gly Thr Pro Pro Asp Phe Ile Leu Lys
85 90 95

Val Val Ile Asp Lys His Pro Val Arg Phe Phe Val His Lys Arg Pro
100 105 110

His Val Asp Phe Phe Leu Glu Val Val Ser Gln Trp Tyr Glu Leu Val
115 120 125

Val Phe Thr Ala Ser Met Glu Ile Tyr Gly Ser Ala Val Ala Asp Lys
130 135 140

Leu Asp Asn Ser Arg Ser Ile Leu Lys Arg Arg Tyr Tyr Arg Gln His
145 150 155 160

Cys Thr Leu Glu Leu Gly Ser Tyr Ile Lys Asp Leu Ser Val Val His
165 170 175

Ser Asp Leu Ser Ser Ile Val Ile Leu Asp Asn Ser Pro Gly Ala Tyr
180 185 190

Sequence listing as filed1.txt

Arg Ser His Pro Asp Asn Ala Ile Pro Ile Lys Ser Trp Phe Ser Asp
195 200 205

Pro Ser Asp Thr Ala Leu Leu Asn Leu Leu Pro Met Leu Asp Ala Leu
210 215 220

Arg Phe Thr Ala Asp Val Arg Ser Val Leu Ser Arg Asn Leu His Gln
225 230 235 240

His Arg Leu Trp

<210> 171

<211> 3020

<212> DNA

<213> Drosophila melanogaster

<400> 171

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aacctgaagc aacacgtttt aaaatataca actactacta acaactgtca cagccaagtt	180
acaaaagtgc taaatcccag aaataaccta agagccgact taaaaccgcg caaatacata	240
aaaaaaaaatc ttctccaaaag cagaaacaaa aacttgtgaa aaactagaat taaaaaaaga	300
tttttttaaaa aaaatcagct agtgcaaaat aaacgggaag aatttttttt tgtgtccctt	360
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tgctggcggc acgggaacgg gatagaaata gatatagccg aaagcgactg gaaagcaaag	480
gaagctaact aaattggatt acaatcaatt aaatagagac ggatacggaa actatgttca	540
gcgagacagg catataactc aggaacttaa gatatataga aagaaaaaaaa aaccagaca	600
acataatcgc aatggccctt taccgctctg atccgtattc cataatggac gaccaacttt	660
tttcaaatat ttcaatattc gatatggata atgatctgta cgatatggac aaactccttt	720
cgtcgtccac cattcagagt gatctcgaga agatcgagga catggaaagt gtatttcaag	780
actatgactt agaggaggat atgaagccag agatccgcaa catcgactgc atgtggccgg	840
cgatgtccag ctgtttgacc agcggtaacg gtaatggaat agagagcgga aacagtgcag	900
cctcgtcgtc cagcgaaacc ggtgccgtat ccctggcgat ggtttccggc tctacgaatc	960
tctacagcgc gtatcaacga tcgcagacga cagataacac ccagtcaaat caacagcatg	1020
tcgtcaacag tgccgagaac atgccggtga tcatcaagaa ggagctcgca gatctggact	1080

Sequence listing as filed1.txt

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gccaacagca	gttgaaccaa	cagcaactgg	acgagcaaca	acaggccatc	gatatagcca	1560
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gcatcaccac	caacaacaac	aacagcaaca	acaaaaacaa	caaattgaag	aacaacagca	1740
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tccagatggc	ccataagatc	tcgattgatc	acatgaagca	aaaaccgcgc	tacaataact	1980
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tgtatatgca	agatttgtat	atcctcctac	tttttttttt	ttgcaattta	ctttgattta	2880
gcttcgatcc	tttcttgaca	ttaagcccta	aatatgattt	ttttctggag	aacttcaata	2940
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Sequence listing as filed1.txt

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3020

<210> 172

<211> 706

<212> PRT

<213> Drosophila melanogaster

<400> 172

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Asp Leu Tyr Asp Met Asp Lys Leu Leu Ser Ser Ser Thr Ile Gln Ser
20 25 30

Asp Leu Glu Lys Ile Glu Asp Met Glu Ser Val Phe Gln Asp Tyr Asp
35 40 45

Leu Glu Glu Asp Met Lys Pro Glu Ile Arg Asn Ile Asp Cys Met Trp
50 55 60

Pro Ala Met Ser Ser Cys Leu Thr Ser Gly Asn Gly Asn Gly Ile Glu
65 70 75 80

Ser Gly Asn Ser Ala Ala Ser Ser Tyr Ser Glu Thr Gly Ala Val Ser
85 90 95

Leu Ala Met Val Ser Gly Ser Thr Asn Leu Tyr Ser Ala Tyr Gln Arg
100 105 110

Ser Gln Thr Thr Asp Asn Thr Gln Ser Asn Gln Gln His Val Val Asn
115 120 125

Ser Ala Glu Asn Met Pro Val Ile Ile Lys Lys Glu Leu Ala Asp Leu
130 135 140

Asp Tyr Thr Val Cys Gln Lys Arg Leu Arg Leu Ser Gly Gly Asp Lys
145 150 155 160

Lys Ser Gln Ile Gln Asp Glu Val His Leu Ile Pro Pro Gly Gly Ser
165 170 175

Leu Leu Arg Lys Arg Asn Asn Gln Asp Ile Ile Arg Lys Ser Gly Glu
180 185 190

Sequence listing as filed1.txt

Leu Ser Gly Ser Asp Ser Ile Lys Tyr Gln Arg Pro Asp Thr Pro His
195 200 205

Ser Leu Thr Asp Glu Val Ala Ala Ser Glu Phe Arg His Asn Val Asp
210 215 220

Leu Arg Ala Cys Val Met Gly Ser Asn Asn Ile Ser Leu Thr Gly Asn
225 230 235 240

Asp Ser Asp Val Asn Tyr Ile Lys Gln Ile Ser Arg Glu Leu Gln Asn
245 250 255

Thr Gly Lys Asp Pro Leu Pro Val Arg Tyr Ile Pro Pro Ile Asn Asp
260 265 270

Val Leu Asp Val Leu Asn Gln His Ser Asn Ser Thr Gly Gly Gln Gln
275 280 285

Gln Leu Asn Gln Gln Gln Leu Asp Glu Gln Gln Gln Ala Ile Asp Ile
290 295 300

Ala Thr Gly Arg Asn Thr Val Asp Ser Pro Pro Thr Thr Gly Ser Asp
305 310 315 320

Ser Asp Ser Asp Asp Gly Glu Pro Leu Asn Phe Asp Leu Arg His His
325 330 335

Arg Thr Ser Lys Ser Gly Ser Asn Ala Ser Ile Thr Thr Asn Asn Asn
340 345 350

Asn Ser Asn Asn Lys Asn Asn Lys Leu Lys Asn Asn Ser Asn Gly Met
355 360 365

Leu His Met Met His Ile Thr Asp His Ser Tyr Thr Arg Cys Asn Asp
370 375 380

Met Val Asp Asp Gly Pro Asn Leu Glu Thr Pro Ser Asp Ser Asp Glu
385 390 395 400

Glu Ile Asp Val Val Ser Tyr Thr Asp Lys Lys Leu Pro Thr Asn Pro
405 410 415

Ser Cys His Leu Met Gly Ala Leu Gln Phe Gln Met Ala His Lys Ile
420 425 430

Ser Ile Asp His Met Lys Gln Lys Pro Arg Tyr Asn Asn Phe Asn Leu
435 440 445

Sequence listing as filed1.txt

Pro Tyr Thr Pro Ala Ser Ser Ser Pro Val Lys Ser Val Ala Asn Ser
450 455 460

Arg Tyr Pro Ser Pro Ser Thr Pro Tyr Gln Asn Cys Ser Ser Ala
465 470 475 480

Ser Pro Ser Tyr Ser Pro Leu Ser Val Asp Ser Ser Asn Val Ser Ser
485 490 495

Ser Ser Ser Ser Ser Ser Ser Gln Ser Ser Phe Thr Thr Ser Ser Ser
500 505 510

Asn Lys Gly Arg Lys Arg Ser Ser Leu Lys Asp Pro Gly Leu Leu Ile
515 520 525

Ser Ser Ser Ser Val Tyr Leu Pro Gly Val Asn Asn Lys Val Thr His
530 535 540

Ser Ser Met Met Ser Lys Lys Ser Arg Gly Lys Lys Val Val Gly Thr
545 550 555 560

Ser Ser Gly Asn Thr Ser Pro Ile Ser Ser Gly Gln Asp Val Asp Ala
565 570 575

Met Asp Arg Asn Trp Gln Arg Arg Ser Gly Gly Ile Ala Thr Ser Thr
580 585 590

Ser Ser Asn Ser Ser Val His Arg Lys Asp Phe Val Leu Gly Phe Asp
595 600 605

Glu Ala Asp Thr Ile Glu Lys Arg Asn Gln His Asn Asp Met Glu Arg
610 615 620

Gln Arg Arg Ile Gly Leu Lys Asn Leu Phe Glu Ala Leu Lys Lys Gln
625 630 635 640

Ile Pro Thr Ile Arg Asp Lys Glu Arg Ala Pro Lys Val Asn Ile Leu
645 650 655

Arg Glu Ala Ala Lys Leu Cys Ile Gln Leu Thr Gln Glu Glu Lys Glu
660 665 670

Leu Ser Met Gln Arg Gln Leu Leu Ser Leu Gln Leu Lys Gln Arg Gln
675 680 685

Asp Thr Leu Ala Ser Tyr Gln Met Glu Leu Asn Glu Ser Arg Ser Val

690

Sequence listing as filed1.txt
695 700Ser Gly
705

<210> 173

<211> 2121

<212> DNA

<213> Homo sapiens

<400> 173

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cagcgggagg gcactttgca ctggaactta caacaccga gcaaggacgc gactctccc	420
acgcggggag gctatttctgc ccatttgggg acaactcccc gccgctgcca ggacccgctt	480
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cagcagctc ccgcgacgat gcccctcaac gttagcttca ccaacaggaa ctatgacctc	600
gactacgact cggcgcagcc gtatttctac tgcgacgagg aggagaactt ctaccagcag	660
cagcagcaga gcgagctgca gccccggcg ccagcagagg atatctggaa gaaattcgag	720
ctgctgcca ccccgcccct gtcccctagc cgccgctccg ggctctgctc gccctcctac	780
gttgcggtca cacccttctc ctttcgggga gacaacgacg gcggtggcgg gagcttctcc	840
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tggagcggct tctcggccgc cgccaagctc gtctcagaga agctggcctc ctaccaggct	1020
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cccagcccc tgggtgctca tgaggagaca ccgccacca ccagcagcga ctctgaggag	1320
gaacaagaag atgaggaaga aatcgatggt gtttctgtgg aaaagaggca ggctcctggc	1380

Sequence listing as filed1.txt

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cggaactctt gtgcgtaagg aaaagtaagg aaaacgattc cttctaacag aaatgtcctg 1920
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<210> 174

<211> 439

<212> PRT

<213> Homo sapiens

<400> 174

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Met Pro Leu Asn Val Ser Phe Thr Asn Arg Asn Tyr Asp Leu Asp Tyr
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20     25     30
Gln Gln Gln Gln Gln Ser Glu Leu Gln Pro Pro Ala Pro Ser Glu Asp
35     40     45
Ile Trp Lys Lys Phe Glu Leu Leu Pro Thr Pro Pro Leu Ser Pro Ser
50     55     60
Arg Arg Ser Gly Leu Cys Ser Pro Ser Tyr Val Ala Val Thr Pro Phe
65     70     75     80
Ser Leu Arg Gly Asp Asn Asp Gly Gly Gly Gly Ser Phe Ser Thr Ala
85     90     95

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Sequence listing as filed1.txt

Asp Gln Leu Glu Met Val Thr Glu Leu Leu Gly Gly Asp Met Val Asn
100 105 110

Gln Ser Phe Ile Cys Asp Pro Asp Asp Glu Thr Phe Ile Lys Asn Ile
115 120 125

Ile Ile Gln Asp Cys Met Trp Ser Gly Phe Ser Ala Ala Ala Lys Leu
130 135 140

Val Ser Glu Lys Leu Ala Ser Tyr Gln Ala Ala Arg Lys Asp Ser Gly
145 150 155 160

Ser Pro Asn Pro Ala Arg Gly His Ser Val Cys Ser Thr Ser Ser Leu
165 170 175

Tyr Leu Gln Asp Leu Ser Ala Ala Ala Ser Glu Cys Ile Asp Pro Ser
180 185 190

Val Val Phe Pro Tyr Pro Leu Asn Asp Ser Ser Ser Pro Lys Ser Cys
195 200 205

Ala Ser Gln Asp Ser Ser Ala Phe Ser Pro Ser Ser Asp Ser Leu Leu
210 215 220

Ser Ser Thr Glu Ser Ser Pro Gln Gly Ser Pro Glu Pro Leu Val Leu
225 230 235 240

His Glu Glu Thr Pro Pro Thr Thr Ser Ser Asp Ser Glu Glu Glu Gln
245 250 255

Glu Asp Glu Glu Glu Ile Asp Val Val Ser Val Glu Lys Arg Gln Ala
260 265 270

Pro Gly Lys Arg Ser Glu Ser Gly Ser Pro Ser Ala Gly Gly His Ser
275 280 285

Lys Pro Pro His Ser Pro Leu Val Leu Lys Arg Cys His Val Ser Thr
290 295 300

His Gln His Asn Tyr Ala Ala Pro Pro Ser Thr Arg Lys Asp Tyr Pro
305 310 315 320

Ala Ala Lys Arg Val Lys Leu Asp Ser Val Arg Val Leu Arg Gln Ile
325 330 335

Ser Asn Asn Arg Lys Cys Thr Ser Pro Arg Ser Ser Asp Thr Glu Glu
340 345 350

Sequence listing as filed1.txt

Asn Val Lys Arg Arg Thr His Asn Val Leu Glu Arg Gln Arg Arg Asn
355 360 365

Glu Leu Lys Arg Ser Phe Phe Ala Leu Arg Asp Gln Ile Pro Glu Leu
370 375 380

Glu Asn Asn Glu Lys Ala Pro Lys Val Val Ile Leu Lys Lys Ala Thr
385 390 395 400

Ala Tyr Ile Leu Ser Val Gln Ala Glu Glu Gln Lys Leu Ile Ser Glu
405 410 415

Glu Asp Leu Leu Arg Lys Arg Arg Glu Gln Leu Lys His Lys Leu Glu
420 425 430

Gln Leu Arg Asn Ser Cys Ala
435

<210> 175

<211> 3762

<212> DNA

<213> Drosophila melanogaster

<400> 175

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Sequence listing as filed1.txt						
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cagcatttgg	gctgcgtgtg	cgctagtcta	ttgctgatgc	tggaacaggc	gccgacatcc	2640
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Sequence listing as filed1.txt

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<211> 1169

<212> PRT

<213> Drosophila melanogaster

<400> 176

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Phe Glu Gly Ser Val Ser Gln Cys Ile Gly Ser Ile Ala Ala Val Asn
 20 25 30

Ile Lys Pro Ser Asn Pro Ala Ser Gly Ser Ala Ser Val Ala Ser Gly
 35 40 45

Ser Pro Ser Gly Ser Ala Ala Ser Val Gln Thr Gly Asn Ala Asp Asp
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50

Sequence listing as filed1.txt

55

60

Gly Ser Ala Ala Thr Lys Tyr Glu Asp Pro Asp Tyr Pro Pro Asp Ser
65 70 75 80

Pro Leu Trp Leu Ile Phe Thr Glu Lys Ser Lys Ala Leu Asp Ile Leu
85 90 95

Arg His Tyr Lys Glu Ala Arg Leu Arg Glu Phe Pro Asn Leu Glu Gln
100 105 110

Ala Glu Ser Tyr Val Gln Phe Gly Phe Glu Ser Ile Glu Ala Leu Lys
115 120 125

Arg Phe Cys Lys Ala Lys Pro Glu Ser Lys Pro Ile Pro Ile Ile Ser
130 135 140

Gly Ser Gly Tyr Lys Ser Ser Pro Thr Ser Thr Asp Asn Ser Cys Ser
145 150 155 160

Ser Ser Pro Thr Gly Asn Gly Ser Gly Phe Ile Ile Pro Leu Gly Ser
165 170 175

Asn Ser Ser Met Ser Asn Leu Leu Leu Ser Asp Ser Pro Thr Ser Ser
180 185 190

Pro Ser Ser Ser Ser Asn Val Ile Ala Asn Gly Arg Gln Gln Gln Met
195 200 205

Gln Gln Gln Gln Gln Gln Gln Pro Gln Gln Pro Asp Val Ser Gly Glu
210 215 220

Gly Pro Pro Phe Arg Ala Pro Thr Lys Gln Glu Leu Val Glu Phe Arg
225 230 235 240

Lys Gln Ile Glu Gly Gly His Ile Asp Arg Val Lys Arg Ile Ile Trp
245 250 255

Glu Asn Pro Arg Phe Leu Ile Ser Ser Gly Asp Thr Pro Thr Ser Leu
260 265 270

Lys Glu Gly Cys Arg Tyr Asn Ala Met His Ile Cys Ala Gln Val Asn
275 280 285

Lys Ala Arg Ile Ala Gln Leu Leu Leu Lys Thr Ile Ser Asp Arg Glu
290 295 300

Sequence listing as filed1.txt

Phe Thr Gln Leu Tyr Val Gly Lys Lys Gly Ser Gly Lys Met Cys Ala
305 310 315 320

Ala Leu Asn Ile Ser Leu Leu Asp Tyr Tyr Leu Asn Met Pro Asp Lys
325 330 335

Gly Arg Gly Glu Thr Pro Leu His Phe Ala Ala Lys Asn Gly His Val
340 345 350

Ala Met Val Glu Val Leu Val Ser Tyr Pro Glu Cys Lys Ser Leu Arg
355 360 365

Asn His Glu Gly Lys Glu Pro Lys Glu Ile Ile Cys Leu Arg Asn Ala
370 375 380

Asn Ala Thr His Val Thr Ile Lys Lys Leu Glu Leu Leu Leu Tyr Asp
385 390 395 400

Pro His Phe Val Pro Val Leu Arg Ser Gln Ser Asn Thr Leu Pro Pro
405 410 415

Lys Val Gly Gln Pro Phe Ser Pro Lys Asp Pro Pro Asn Leu Gln His
420 425 430

Lys Ala Asp Asp Tyr Glu Gly Leu Ser Val Asp Leu Ala Ile Ser Ala
435 440 445

Leu Ala Gly Pro Met Ser Arg Glu Lys Ala Met Asn Phe Tyr Arg Arg
450 455 460

Trp Lys Thr Pro Pro Arg Val Ser Asn Asn Val Met Ser Pro Leu Ala
465 470 475 480

Gly Ser Pro Phe Ser Ser Pro Val Lys Val Thr Pro Ser Lys Ser Ile
485 490 495

Phe Asp Arg Ser Ala Gly Asn Ser Ser Pro Val His Ser Gly Arg Arg
500 505 510

Val Leu Phe Ser Pro Leu Ala Glu Ala Thr Ser Ser Pro Lys Pro Thr
515 520 525

Lys Asn Val Pro Asn Gly Thr Asn Glu Cys Glu His Asn Asn Asn Asn
530 535 540

Val Lys Pro Val Tyr Pro Leu Glu Phe Pro Ala Thr Pro Ile Arg Lys
545 550 555 560

Sequence listing as filed1.txt

Met Lys Pro Asp Leu Phe Met Ala Tyr Arg Asn Asn Asn Ser Phe Asp
565 570

Ser Pro Ser Leu Ala Asp Asp Ser Gln Ile Leu Asp Met Ser Leu Ser
580 585 590

Arg Ser Leu Asn Ala Ser Leu Asn Asp Ser Phe Arg Glu Arg His Ile
595 600 605

Lys Asn Thr Asp Ile Glu Lys Gly Leu Glu Val Val Gly Arg Gln Leu
610 615 620

Ala Arg Gln Glu Gln Leu Glu Trp Arg Glu Tyr Trp Asp Phe Leu Asp
625 630 635 640

Ser Phe Leu Asp Ile Gly Thr Thr Glu Gly Leu Ala Arg Leu Glu Ala
645 650 655

Tyr Phe Leu Glu Lys Thr Glu Gln Gln Ala Asp Lys Ser Glu Thr Val
660 665 670

Trp Asn Phe Ala His Leu His Gln Tyr Phe Asp Ser Met Ala Gly Glu
675 680 685

Gln Gln Gln Gln Leu Arg Lys Asp Lys Asn Glu Ala Ala Gly Ala Thr
690 695 700

Ser Pro Ser Ala Gly Val Met Thr Pro Tyr Thr Cys Val Glu Lys Ser
705 710 715 720

Leu Gln Val Phe Ala Lys Arg Ile Thr Lys Thr Leu Ile Asn Lys Ile
725 730 735

Gly Asn Met Val Ser Ile Asn Asp Thr Leu Leu Cys Glu Leu Lys Arg
740 745 750

Leu Lys Ser Leu Ile Val Ser Phe Lys Asp Asp Ala Arg Phe Ile Ser
755 760 765

Val Asp Phe Ser Lys Val His Ser Arg Ile Ala His Leu Val Ala Ser
770 775 780

Tyr Val Thr His Ser Gln Glu Val Ser Val Ala Met Arg Leu Gln Leu
785 790 795 800

Leu Gln Met Leu Arg Ser Leu Arg Gln Leu Leu Ala Asp Glu Arg Gly
805 810 815

Sequence listing as filed1.txt

Arg Glu Gln His Leu Gly Cys Val Cys Ala Ser Leu Leu Leu Met Leu
820 825 830

Glu Gln Ala Pro Thr Ser Ala Val His Leu Pro Asp Thr Leu Lys Thr
835 840 845

Glu Glu Leu Cys Cys Ala Ala Trp Glu Thr Glu Gln Cys Cys Ala Cys
850 855 860

Leu Trp Asp Ala Asn Leu Ser Arg Lys Thr Ser Arg Arg Lys Arg Thr
865 870 875 880

Lys Ser Leu Arg Ala Ala Ala Val Val Gln Ser Gln Gly Gln Leu Gln
885 890 895

Asp Thr Ser Gly Ser Thr Gly Ser Ser Ala Leu His Ala Ser Leu Gly
900 905 910

Val Gly Ser Thr Ser Leu Gly Ala Ser Arg Val Val Ala Ser Ala Ser
915 920 925

Lys Asp Ala Trp Arg Arg Gln Gln Ser Asp Asp Glu Asp Tyr Asp Ser
930 935 940

Asp Glu Gln Val Ile Phe Phe Asp Cys Thr Asn Val Thr Leu Pro Tyr
945 950 955 960

Gly Ser Ser Ser Glu Asp Glu Glu Asn Phe Arg Thr Pro Pro Gln Ser
965 970 975

Leu Ser Pro Gly Ile Ser Met Asp Leu Glu Pro Arg Tyr Glu Leu Phe
980 985 990

Ile Phe Gly Asn Glu Pro Thr Lys Arg Asp Leu Asp Val Leu Asn Ala
995 1000 1005

Leu Ser Asn Val Asp Ile Asp Lys Glu Thr Leu Pro His Val Tyr
1010 1015 1020

Ala Trp Lys Thr Ala Met Glu Ser Tyr Ser Cys Ala Glu Met Asn
1025 1030 1035

Leu Asn Val Lys Val Gln Lys Pro Glu Pro Trp Tyr Ser Gly Thr
1040 1045 1050

Ser Ser Ser His Asn Ser Gln Pro Leu Leu His Pro Lys Arg Leu
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Sequence listing as filed1.txt

1055

1060

1065

Leu Ala Thr Pro Lys Leu Asn Ala Val Val Ser Gly Arg Arg Gly
1070 1075 1080

Ser Gly Pro Leu Thr Ala Pro Val Thr Pro Arg Leu Ala Arg Thr
1085 1090 1095

Pro Ser Ala Ala Ser Ile Gln Val Ala Ser Glu Thr Asn Gly Glu
1100 1105 1110

Ser Val Gly Thr Ala Val Thr Pro Ala Ser Pro Ile Leu Ser Phe
1115 1120 1125

Ala Ala Leu Thr Ala Ala Thr Gln Ser Phe Gln Thr Pro Leu Asn
1130 1135 1140

Lys Val Arg Gly Leu Phe Ser Gln Tyr Arg Asp Gln Arg Ser Tyr
1145 1150 1155

Asn Glu Gly Asp Thr Pro Leu Gly Asn Arg Asn
1160 1165

<210> 177

<211> 3790

<212> DNA

<213> Drosophila melanogaster

<400> 177

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caagtacgag gatcccgaact atccaccgga ctcgccactg tggctgatct tcacggagaa	420
atccaaggcg ctggacatcc tgcgacacta caaggaggcg cgcctccgcg agtttcccaa	480
tctggagcag gcggagagtt acgttcagtt tgggttcgag agcatcgagg cgctcaagag	540
attttgcaag gcaaagccc aaagcaagcc cattccgata atcagcggtg gcggttacaa	600
gagctcaccg acctcgacgg acaattcgtg ctctcctcgc cgcacgggta acggcagtg	660

Sequence listing as filed1.txt

cttcatcatt cccctgggaa gcaattcctc aatgtcgaat ttactgctca gtgactcacc	720
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gcagcaacag cagcagcagc cgcagcagcc ggatgtgtcc ggagaaggcc ctcctttccg	840
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ccgggtgaag aggattatat gggagaatcc acgatttttg atcagcagcg gtgatacgcc	960
caccagtttg aaggagggct gtcgctataa tgccatgcac atctgcgccc aggtcaataa	1020
ggccaggatc gctcagttgc tgtaaagac catttcggat cgggagttca ctcagcttta	1080
cgttggcaag aagggcagtg gcaagatgtg tgctgccctc aacatcagtc tcctggacta	1140
ttacctgaac atgccggaca aggggcgcgg cgaaacaccg ctccactttg ccgcaaagaa	1200
cggatcatgtg gccatggctg aggttctcgt ttcctatccg gaggcgaat cgctgcggaa	1260
tcagtagggc aaggagccca aggaatcat ctgcctgcgt aatgctaag ctacacatgt	1320
gaccatcaag aagctggagc tgctcttgta cgatccgcat tttgtgcccg tactaagatc	1380
ccagtcaaat aactgccgc caaaagtggg tcaaccgttc tcgcccagg atccaccgaa	1440
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gagcctaagc cgcagcctga atgcgtcgt aaatgacagc ttccgtgagc ggcacatcaa	1980
gaacactgat atcgagaagg gtctggaggt ggtcggccgc caactggcac gacaggagca	2040
gttagagtgg cgcgagtact gggattttct cgattcattt ttggacattg gtacgaccga	2100
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taaaacgttg atcaacaaaa tcggcaacat ggtgtccatc aacgacacgc tgctctgtga	2400
gctcaaaaga ctgaaatcgc tgattgtcag cttcaaggat gatgcccgt tcattagcgt	2460
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Sequence listing as filed1.txt

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gctgatgctg gaacaggcgc cgacatccgc cgtgcatcta ccagacactc tgaagaccga	2700
ggagctatgt tgcgccgcct gggagacgga gcagtgttgc gcctgtctgt gggacgcaaa	2760
tctcagccgt aagaccagtc gtcgaaagcg cactaagtcg ctgcgggcag ctgctgttgt	2820
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ttcgcttggg gtgggatcga ccagtttggg agcatcgagg gtcgtggcgt ccgcttcgaa	2940
agatgcttgg cgccgtcaac aaagcgacga cgaggactac gacagcgatg agcaagtaat	3000
ctttttcgac tgcactaatg ttacgctgcc ttatggaagc agcagcgagg acgaggaana	3060
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ctgaaacgga atcggccccg aaacagaaac agaaacagcg actgattgat gaaaggccga	3720
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<210> 178

<211> 1169

<212> PRT

<213> Drosophila melanogaster

<400> 178

Met	Ser	Thr	Tyr	Phe	Gly	Val	Tyr	Ile	Pro	Thr	Ser	Lys	Ala	Gly	Cys
1				5				10						15	

Phe	Glu	Gly	Ser	Val	Ser	Gln	Cys	Ile	Gly	Ser	Ile	Ala	Ala	Val	Asn
			20				25						30		

Sequence listing as filed1.txt

Ile Lys Pro Ser Asn Pro Ala Ser Gly Ser Ala Ser Val Ala Ser Gly
35 40 45

Ser Pro Ser Gly Ser Ala Ala Ser Val Gln Thr Gly Asn Ala Asp Asp
50 55 60

Gly Ser Ala Ala Thr Lys Tyr Glu Asp Pro Asp Tyr Pro Pro Asp Ser
65 70 75 80

Pro Leu Trp Leu Ile Phe Thr Glu Lys Ser Lys Ala Leu Asp Ile Leu
85 90 95

Arg His Tyr Lys Glu Ala Arg Leu Arg Glu Phe Pro Asn Leu Glu Gln
100 105 110

Ala Glu Ser Tyr Val Gln Phe Gly Phe Glu Ser Ile Glu Ala Leu Lys
115 120 125

Arg Phe Cys Lys Ala Lys Pro Glu Ser Lys Pro Ile Pro Ile Ile Ser
130 135 140

Gly Ser Gly Tyr Lys Ser Ser Pro Thr Ser Thr Asp Asn Ser Cys Ser
145 150 155 160

Ser Ser Pro Thr Gly Asn Gly Ser Gly Phe Ile Ile Pro Leu Gly Ser
165 170 175

Asn Ser Ser Met Ser Asn Leu Leu Leu Ser Asp Ser Pro Thr Ser Ser
180 185 190

Pro Ser Ser Ser Ser Asn Val Ile Ala Asn Gly Arg Gln Gln Gln Met
195 200 205

Gln Gln Gln Gln Gln Gln Gln Pro Gln Gln Pro Asp Val Ser Gly Glu
210 215 220

Gly Pro Pro Phe Arg Ala Pro Thr Lys Gln Glu Leu Val Glu Phe Arg
225 230 235 240

Lys Gln Ile Glu Gly Gly His Ile Asp Arg Val Lys Arg Ile Ile Trp
245 250 255

Glu Asn Pro Arg Phe Leu Ile Ser Ser Gly Asp Thr Pro Thr Ser Leu
260 265 270

Lys Glu Gly Cys Arg Tyr Asn Ala Met His Ile Cys Ala Gln Val Asn

Sequence listing as filed1.txt

275

280

285

Lys Ala Arg Ile Ala Gln Leu Leu Leu Lys Thr Ile Ser Asp Arg Glu
290 295 300

Phe Thr Gln Leu Tyr Val Gly Lys Lys Gly Ser Gly Lys Met Cys Ala
305 310 315 320

Ala Leu Asn Ile Ser Leu Leu Asp Tyr Tyr Leu Asn Met Pro Asp Lys
325 330 335

Gly Arg Gly Glu Thr Pro Leu His Phe Ala Ala Lys Asn Gly His Val
340 345 350

Ala Met Val Glu Val Leu Val Ser Tyr Pro Glu Cys Lys Ser Leu Arg
355 360 365

Asn His Glu Gly Lys Glu Pro Lys Glu Ile Ile Cys Leu Arg Asn Ala
370 375 380

Asn Ala Thr His Val Thr Ile Lys Lys Leu Glu Leu Leu Leu Tyr Asp
385 390 395 400

Pro His Phe Val Pro Val Leu Arg Ser Gln Ser Asn Thr Leu Pro Pro
405 410 415

Lys Val Gly Gln Pro Phe Ser Pro Lys Asp Pro Pro Asn Leu Gln His
420 425 430

Lys Ala Asp Asp Tyr Glu Gly Leu Ser Val Asp Leu Ala Ile Ser Ala
435 440 445

Leu Ala Gly Pro Met Ser Arg Glu Lys Ala Met Asn Phe Tyr Arg Arg
450 455 460

Trp Lys Thr Pro Pro Arg Val Ser Asn Asn Val Met Ser Pro Leu Ala
465 470 475 480

Gly Ser Pro Phe Ser Ser Pro Val Lys Val Thr Pro Ser Lys Ser Ile
485 490 495

Phe Asp Arg Ser Ala Gly Asn Ser Ser Pro Val His Ser Gly Arg Arg
500 505 510

Val Leu Phe Ser Pro Leu Ala Glu Ala Thr Ser Ser Pro Lys Pro Thr
515 520 525

Sequence listing as filed1.txt

Lys Asn Val Pro Asn Gly Thr Asn Glu Cys Glu His Asn Asn Asn Asn
530 535 540

Val Lys Pro Val Tyr Pro Leu Glu Phe Pro Ala Thr Pro Ile Arg Lys
545 550 555 560

Met Lys Pro Asp Leu Phe Met Ala Tyr Arg Asn Asn Asn Ser Phe Asp
565 570 575

Ser Pro Ser Leu Ala Asp Asp Ser Gln Ile Leu Asp Met Ser Leu Ser
580 585 590

Arg Ser Leu Asn Ala Ser Leu Asn Asp Ser Phe Arg Glu Arg His Ile
595 600 605

Lys Asn Thr Asp Ile Glu Lys Gly Leu Glu Val Val Gly Arg Gln Leu
610 615 620

Ala Arg Gln Glu Gln Leu Glu Trp Arg Glu Tyr Trp Asp Phe Leu Asp
625 630 635 640

Ser Phe Leu Asp Ile Gly Thr Thr Glu Gly Leu Ala Arg Leu Glu Ala
645 650 655

Tyr Phe Leu Glu Lys Thr Glu Gln Gln Ala Asp Lys Ser Glu Thr Val
660 665 670

Trp Asn Phe Ala His Leu His Gln Tyr Phe Asp Ser Met Ala Gly Glu
675 680 685

Gln Gln Gln Gln Leu Arg Lys Asp Lys Asn Glu Ala Ala Gly Ala Thr
690 695 700

Ser Pro Ser Ala Gly Val Met Thr Pro Tyr Thr Cys Val Glu Lys Ser
705 710 715 720

Leu Gln Val Phe Ala Lys Arg Ile Thr Lys Thr Leu Ile Asn Lys Ile
725 730 735

Gly Asn Met Val Ser Ile Asn Asp Thr Leu Leu Cys Glu Leu Lys Arg
740 745 750

Leu Lys Ser Leu Ile Val Ser Phe Lys Asp Asp Ala Arg Phe Ile Ser
755 760 765

Val Asp Phe Ser Lys Val His Ser Arg Ile Ala His Leu Val Ala Ser
770 775 780

Sequence listing as filed1.txt

Tyr Val Thr His Ser Gln Glu Val Ser Val Ala Met Arg Leu Gln Leu
 785 790 795 800
 Leu Gln Met Leu Arg Ser Leu Arg Gln Leu Leu Ala Asp Glu Arg Gly
 805 810 815
 Arg Glu Gln His Leu Gly Cys Val Cys Ala Ser Leu Leu Leu Met Leu
 820 825 830
 Glu Gln Ala Pro Thr Ser Ala Val His Leu Pro Asp Thr Leu Lys Thr
 835 840 845
 Glu Glu Leu Cys Cys Ala Ala Trp Glu Thr Glu Gln Cys Cys Ala Cys
 850 855 860
 Leu Trp Asp Ala Asn Leu Ser Arg Lys Thr Ser Arg Arg Lys Arg Thr
 865 870 875 880
 Lys Ser Leu Arg Ala Ala Ala Val Val Gln Ser Gln Gly Gln Leu Gln
 885 890 895
 Asp Thr Ser Gly Ser Thr Gly Ser Ser Ala Leu His Ala Ser Leu Gly
 900 905 910
 Val Gly Ser Thr Ser Leu Gly Ala Ser Arg Val Val Ala Ser Ala Ser
 915 920 925
 Lys Asp Ala Trp Arg Arg Gln Gln Ser Asp Asp Glu Asp Tyr Asp Ser
 930 935 940
 Asp Glu Gln Val Ile Phe Phe Asp Cys Thr Asn Val Thr Leu Pro Tyr
 945 950 955 960
 Gly Ser Ser Ser Glu Asp Glu Glu Asn Phe Arg Thr Pro Pro Gln Ser
 965 970 975
 Leu Ser Pro Gly Ile Ser Met Asp Leu Glu Pro Arg Tyr Glu Leu Phe
 980 985 990
 Ile Phe Gly Asn Glu Pro Thr Lys Arg Asp Leu Asp Val Leu Asn Ala
 995 1000 1005
 Leu Ser Asn Val Asp Ile Asp Lys Glu Thr Leu Pro His Val Tyr
 1010 1015 1020
 Ala Trp Lys Thr Ala Met Glu Ser Tyr Ser Cys Ala Glu Met Asn
 1025 1030 1035

Sequence listing as filed1.txt

Leu Asn Val Lys Val Gln Lys Pro Glu Pro Trp Tyr Ser Gly Thr
 1040 1045 1050

Ser Ser Ser His Asn Ser Gln Pro Leu Leu His Pro Lys Arg Leu
 1055 1060 1065

Leu Ala Thr Pro Lys Leu Asn Ala Val Val Ser Gly Arg Arg Gly
 1070 1075 1080

Ser Gly Pro Leu Thr Ala Pro Val Thr Pro Arg Leu Ala Arg Thr
 1085 1090 1095

Pro Ser Ala Ala Ser Ile Gln Val Ala Ser Glu Thr Asn Gly Glu
 1100 1105 1110

Ser Val Gly Thr Ala Val Thr Pro Ala Ser Pro Ile Leu Ser Phe
 1115 1120 1125

Ala Ala Leu Thr Ala Ala Thr Gln Ser Phe Gln Thr Pro Leu Asn
 1130 1135 1140

Lys Val Arg Gly Leu Phe Ser Gln Tyr Arg Asp Gln Arg Ser Tyr
 1145 1150 1155

Asn Glu Gly Asp Thr Pro Leu Gly Asn Arg Asn
 1160 1165

<210> 179

<211> 3483

<212> DNA

<213> Drosophila melanogaster

<400> 179

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catcgccacg acggagcagc ggactcgcca ctgtggctga tcttcacgga gaaatccaag	120
gcgctggaca tcctgcgaca ctacaaggag gcgcgcctcc gcgagtttcc caatctggag	180
caggcggaga gttacgttca gtttgggttc gagagcatcg aggcgctcaa gagattttgc	240
aaggcaaagc ccgaaagcaa gccattccg ataatcagcg gtagcggta caagagctca	300
ccgacctcga cggacaattc gtgctcctcc tcgccgacgg gtaacggcag tggcttcac	360
attcccctgg gaagcaattc ctcaatgtcg aatttactgc tcagtgactc accgacttcc	420

Sequence listing as filed1.txt

tcgccgagca gctccagcaa cgtcattgcc aatgggcgac agcagcagat gcagcagcaa	480
cagcagcagc agccgcagca gccggatgtg tccggagaag gccctccttt ccgggcgccc	540
accaaacagg aactggtaga gtttcgcaag caaatcgaag gtggtcacat agaccgggtg	600
aagaggatta tatgggagaa tccacgattt ttgatcagca gcggtgatac gcccaccagt	660
ttgaaggagg gctgtcgcta taatgccatg cacatctgcg cccagggtcaa taaggccagg	720
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aagaagggca gtggcaagat gtgtgctgcc ctcaacatca gtctcctgga ctattacctg	840
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aagaagctgg agctgctctt gtacgatccg cattttgtgc ccgtactaag atcccagtca	1080
aatacactgc cgccaaaagt ggggtcaaccg ttctcgcca aagatccacc gaacctgcaa	1140
cacaaagcgg acgattacga gggcctcagc gtggacctgg caatcagtgc gctggcggga	1200
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gagttcccgg cgacacccat tcgaaaaatg aaaccggatt tattcatggc ctatcgcaat	1560
aacaatagct ttgattcgcc atctttggcc gatgactccc aaatcctgga catgagccta	1620
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gtcagcgtag ccatgcgtct acaattgttg cagatgctcc gaagtttgcg gcaactgctg	2280
gccgacgagc gtggctcgaga acagcatttg ggctgcgtgt gcgctagtct attgctgatg	2340

Sequence listing as filed1.txt

ctggaacagg cgccgacatc cgccgtgcat ctaccagaca ctctgaagac cgaggagcta	2400
tgttgccg ccggtggagac ggagcagtgt tgcgcctgtc tgtgggacgc aaatctcagc	2460
cgtaagacca gtcgtcgaaa gcgcactaag tcgctgcggg cagctgctgt tggtcagctc	2520
cagggtcagc ttcaggatac ttcgggatcg acagggctgt ccgccttgca cgcttcgctt	2580
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tggcgccgctc aacaaagcga cgacgaggac tacgacagcg atgagcaagt aatctttttc	2700
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ccaaagctga atgccgtggt cagcggcaga cgcggatccg gaccattgac ggcgccagtt	3120
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ggaatcggcc cggaacacaga aacagaaaca gcgactgatt gatgaaaggc cgactgcata	3420
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tta	3483

<210> 180

<211> 1105

<212> PRT

<213> Drosophila melanogaster

<400> 180

Met	Pro	Thr	His	Gln	His	Cys	His	Arg	His	Asp	Gly	Ala	Ala	Asp	Ser
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Pro	Leu	Trp	Leu	Ile	Phe	Thr	Glu	Lys	Ser	Lys	Ala	Leu	Asp	Ile	Leu
			20					25					30		

Arg	His	Tyr	Lys	Glu	Ala	Arg	Leu	Arg	Glu	Phe	Pro	Asn	Leu	Glu	Gln
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Sequence listing as filed1.txt

35

40

45

Ala Glu Ser Tyr Val Gln Phe Gly Phe Glu Ser Ile Glu Ala Leu Lys
50 55 60

Arg Phe Cys Lys Ala Lys Pro Glu Ser Lys Pro Ile Pro Ile Ile Ser
65 70 75 80

Gly Ser Gly Tyr Lys Ser Ser Pro Thr Ser Thr Asp Asn Ser Cys Ser
85 90 95

Ser Ser Pro Thr Gly Asn Gly Ser Gly Phe Ile Ile Pro Leu Gly Ser
100 105 110

Asn Ser Ser Met Ser Asn Leu Leu Leu Ser Asp Ser Pro Thr Ser Ser
115 120 125

Pro Ser Ser Ser Ser Asn Val Ile Ala Asn Gly Arg Gln Gln Gln Met
130 135 140

Gln Gln Gln Gln Gln Gln Gln Pro Gln Gln Pro Asp Val Ser Gly Glu
145 150 155 160

Gly Pro Pro Phe Arg Ala Pro Thr Lys Gln Glu Leu Val Glu Phe Arg
165 170 175

Lys Gln Ile Glu Gly Gly His Ile Asp Arg Val Lys Arg Ile Ile Trp
180 185 190

Glu Asn Pro Arg Phe Leu Ile Ser Ser Gly Asp Thr Pro Thr Ser Leu
195 200 205

Lys Glu Gly Cys Arg Tyr Asn Ala Met His Ile Cys Ala Gln Val Asn
210 215 220

Lys Ala Arg Ile Ala Gln Leu Leu Leu Lys Thr Ile Ser Asp Arg Glu
225 230 235 240

Phe Thr Gln Leu Tyr Val Gly Lys Lys Gly Ser Gly Lys Met Cys Ala
245 250 255

Ala Leu Asn Ile Ser Leu Leu Asp Tyr Tyr Leu Asn Met Pro Asp Lys
260 265 270

Gly Arg Gly Glu Thr Pro Leu His Phe Ala Ala Lys Asn Gly His Val
275 280 285

Sequence listing as filed1.txt

Ala Met Val Glu Val Leu Val Ser Tyr Pro Glu Cys Lys Ser Leu Arg
290 295 300

Asn His Glu Gly Lys Glu Pro Lys Glu Ile Ile Cys Leu Arg Asn Ala
305 310 315 320

Asn Ala Thr His Val Thr Ile Lys Lys Leu Glu Leu Leu Leu Tyr Asp
325 330 335

Pro His Phe Val Pro Val Leu Arg Ser Gln Ser Asn Thr Leu Pro Pro
340 345 350

Lys Val Gly Gln Pro Phe Ser Pro Lys Asp Pro Pro Asn Leu Gln His
355 360 365

Lys Ala Asp Asp Tyr Glu Gly Leu Ser Val Asp Leu Ala Ile Ser Ala
370 375 380

Leu Ala Gly Pro Met Ser Arg Glu Lys Ala Met Asn Phe Tyr Arg Arg
385 390 395 400

Trp Lys Thr Pro Pro Arg Val Ser Asn Asn Val Met Ser Pro Leu Ala
405 410 415

Gly Ser Pro Phe Ser Ser Pro Val Lys Val Thr Pro Ser Lys Ser Ile
420 425 430

Phe Asp Arg Ser Ala Gly Asn Ser Ser Pro Val His Ser Gly Arg Arg
435 440 445

Val Leu Phe Ser Pro Leu Ala Glu Ala Thr Ser Ser Pro Lys Pro Thr
450 455 460

Lys Asn Val Pro Asn Gly Thr Asn Glu Cys Glu His Asn Asn Asn Asn
465 470 475 480

Val Lys Pro Val Tyr Pro Leu Glu Phe Pro Ala Thr Pro Ile Arg Lys
485 490 495

Met Lys Pro Asp Leu Phe Met Ala Tyr Arg Asn Asn Asn Ser Phe Asp
500 505 510

Ser Pro Ser Leu Ala Asp Asp Ser Gln Ile Leu Asp Met Ser Leu Ser
515 520 525

Arg Ser Leu Asn Ala Ser Leu Asn Asp Ser Phe Arg Glu Arg His Ile
530 535 540

Sequence listing as filed1.txt

Lys Asn Thr Asp Ile Glu Lys Gly Leu Glu Val Val Gly Arg Gln Leu
 545 550 555 560
 Ala Arg Gln Glu Gln Leu Glu Trp Arg Glu Tyr Trp Asp Phe Leu Asp
 565 570 575
 Ser Phe Leu Asp Ile Gly Thr Thr Glu Gly Leu Ala Arg Leu Glu Ala
 580 585 590
 Tyr Phe Leu Glu Lys Thr Glu Gln Gln Ala Asp Lys Ser Glu Thr Val
 595 600 605
 Trp Asn Phe Ala His Leu His Gln Tyr Phe Asp Ser Met Ala Gly Glu
 610 615 620
 Gln Gln Gln Gln Leu Arg Lys Asp Lys Asn Glu Ala Ala Gly Ala Thr
 625 630 635 640
 Ser Pro Ser Ala Gly Val Met Thr Pro Tyr Thr Cys Val Glu Lys Ser
 645 650 655
 Leu Gln Val Phe Ala Lys Arg Ile Thr Lys Thr Leu Ile Asn Lys Ile
 660 665 670
 Gly Asn Met Val Ser Ile Asn Asp Thr Leu Leu Cys Glu Leu Lys Arg
 675 680 685
 Leu Lys Ser Leu Ile Val Ser Phe Lys Asp Asp Ala Arg Phe Ile Ser
 690 695 700
 Val Asp Phe Ser Lys Val His Ser Arg Ile Ala His Leu Val Ala Ser
 705 710 715 720
 Tyr Val Thr His Ser Gln Glu Val Ser Val Ala Met Arg Leu Gln Leu
 725 730 735
 Leu Gln Met Leu Arg Ser Leu Arg Gln Leu Leu Ala Asp Glu Arg Gly
 740 745 750
 Arg Glu Gln His Leu Gly Cys Val Cys Ala Ser Leu Leu Leu Met Leu
 755 760 765
 Glu Gln Ala Pro Thr Ser Ala Val His Leu Pro Asp Thr Leu Lys Thr
 770 775 780
 Glu Glu Leu Cys Cys Ala Ala Trp Glu Thr Glu Gln Cys Cys Ala Cys
 785 790 795 800

Sequence listing as filed1.txt

Leu Trp Asp Ala Asn Leu Ser Arg Lys Thr Ser Arg Arg Lys Arg Thr
 805 810 815
 Lys Ser Leu Arg Ala Ala Ala Val Val Gln Ser Gln Gly Gln Leu Gln
 820 825 830
 Asp Thr Ser Gly Ser Thr Gly Ser Ser Ala Leu His Ala Ser Leu Gly
 835 840 845
 Val Gly Ser Thr Ser Leu Gly Ala Ser Arg Val Val Ala Ser Ala Ser
 850 855 860
 Lys Asp Ala Trp Arg Arg Gln Gln Ser Asp Asp Glu Asp Tyr Asp Ser
 865 870 875 880
 Asp Glu Gln Val Ile Phe Phe Asp Cys Thr Asn Val Thr Leu Pro Tyr
 885 890 895
 Gly Ser Ser Ser Glu Asp Glu Glu Asn Phe Arg Thr Pro Pro Gln Ser
 900 905 910
 Leu Ser Pro Gly Ile Ser Met Asp Leu Glu Pro Arg Tyr Glu Leu Phe
 915 920 925
 Ile Phe Gly Asn Glu Pro Thr Lys Arg Asp Leu Asp Val Leu Asn Ala
 930 935 940
 Leu Ser Asn Val Asp Ile Asp Lys Glu Thr Leu Pro His Val Tyr Ala
 945 950 955 960
 Trp Lys Thr Ala Met Glu Ser Tyr Ser Cys Ala Glu Met Asn Leu Asn
 965 970 975
 Val Lys Val Gln Lys Pro Glu Pro Trp Tyr Ser Gly Thr Ser Ser Ser
 980 985 990
 His Asn Ser Gln Pro Leu Leu His Pro Lys Arg Leu Leu Ala Thr Pro
 995 1000 1005
 Lys Leu Asn Ala Val Val Ser Gly Arg Arg Gly Ser Gly Pro Leu
 1010 1015 1020
 Thr Ala Pro Val Thr Pro Arg Leu Ala Arg Thr Pro Ser Ala Ala
 1025 1030 1035
 Ser Ile Gln Val Ala Ser Glu Thr Asn Gly Glu Ser Val Gly Thr
 Page 212

Sequence listing as filed1.txt
1045 1050

1040

Ala Val Thr Pro Ala Ser Pro Ile Leu Ser Phe Ala Ala Leu Thr
1055 1060 1065

Ala Ala Thr Gln Ser Phe Gln Thr Pro Leu Asn Lys Val Arg Gly
1070 1075 1080

Leu Phe Ser Gln Tyr Arg Asp Gln Arg Ser Tyr Asn Glu Gly Asp
1085 1090 1095

Thr Pro Leu Gly Asn Arg Asn
1100 1105

<210> 181

<211> 4088

<212> DNA

<213> Homo sapiens

<400> 181

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agccgcccct gtactatggg gtgtgtccag tgtatgagga cgtcccagcg agaaatgaaa	180
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cccgatttaa agctttttct accagagaag acgctgagaa atttgctaga ggaatttgtg	300
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tctttagcaa tgacagggtg aaagatgggt tgtgcttggt ggaatcagaa acagtcaaca	420
aagagcgagc gaacagttac aaaaatcccc gcacgcagga cctcaccgcc aagcttcgga	480
aagctgtgga gaaggggagag gaggacacct tttctgacct tatctggagc aacccccggt	540
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aaagaagcaa aaataaatct gtggaactga aggagcggat cagagagtat ttaaagggcc	960
actactacgt gcccctcctg agagcggaag agacttcttc tccagtcacg ggggagctgt	1020

Sequence listing as filed1.txt

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gcctgcaaag actagaagaa tatctcacac agcaggaaaat aggcaaaaag gctcaacaag	1380
aaacaggaga acgggaagcc tcctgccgag ataaagccac cacgtctggc agcaattcca	1440
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ttgataacct gcactacca agatgaacta tttgccgcc tgtcttttcc tgggttggg	2820
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Sequence listing as filed1.txt

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ctcttgggaa gtcttgCagc ccgtgggagt gataccagga gcaacacaga gctcagcagc	3060
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ttgttgagca taaatgatta tacgataaag gtatccgtta ttttggaact catttcagtt	3240
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<210> 182

<211> 783

<212> PRT

<213> Homo sapiens

<400> 182

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Thr	Ser	Lys	Thr	Cys	Ser	Val	Pro	Pro	Ser	Asp	Thr	Asp	Thr	Tyr	Arg
			20				25					30			

Sequence listing as filed1.txt

Ala Gly Ala Thr Ala Ser Lys Glu Pro Pro Leu Tyr Tyr Gly Val Cys
35 40 45

Pro Val Tyr Glu Asp Val Pro Ala Arg Asn Glu Arg Ile Tyr Val Tyr
50 55 60

Glu Asn Lys Lys Glu Ala Leu Gln Ala Val Lys Met Ile Lys Gly Ser
65 70 75 80

Arg Phe Lys Ala Phe Ser Thr Arg Glu Asp Ala Glu Lys Phe Ala Arg
85 90 95

Gly Ile Cys Asp Tyr Phe Pro Ser Pro Ser Lys Thr Ser Leu Pro Leu
100 105 110

Ser Pro Val Lys Thr Ala Pro Leu Phe Ser Asn Asp Arg Leu Lys Asp
115 120 125

Gly Leu Cys Leu Ser Glu Ser Glu Thr Val Asn Lys Glu Arg Ala Asn
130 135 140

Ser Tyr Lys Asn Pro Arg Thr Gln Asp Leu Thr Ala Lys Leu Arg Lys
145 150 155 160

Ala Val Glu Lys Gly Glu Glu Asp Thr Phe Ser Asp Leu Ile Trp Ser
165 170 175

Asn Pro Arg Tyr Leu Ile Gly Ser Gly Asp Asn Pro Thr Ile Val Gln
180 185 190

Glu Gly Cys Arg Tyr Asn Val Met His Val Ala Ala Lys Glu Asn Gln
195 200 205

Ala Ser Ile Cys Gln Leu Thr Leu Asp Val Leu Glu Asn Pro Asp Phe
210 215 220

Met Arg Leu Met Tyr Pro Asp Asp Asp Glu Ala Met Leu Gln Lys Arg
225 230 235 240

Ile Arg Tyr Val Val Asp Leu Tyr Leu Asn Thr Pro Asp Lys Met Gly
245 250 255

Tyr Asp Thr Pro Leu His Phe Ala Cys Lys Phe Gly Asn Ala Asp Val
260 265 270

Val Asn Val Leu Ser Ser His His Leu Ile Val Lys Asn Ser Arg Asn
275 280 285

Sequence listing as filed1.txt

Lys Tyr Asp Lys Thr Pro Glu Asp Val Ile Cys Glu Arg Ser Lys Asn
290 295 300

Lys Ser Val Glu Leu Lys Glu Arg Ile Arg Glu Tyr Leu Lys Gly His
305 310 315 320

Tyr Tyr Val Pro Leu Leu Arg Ala Glu Glu Thr Ser Ser Pro Val Ile
325 330 335

Gly Glu Leu Trp Ser Pro Asp Gln Thr Ala Glu Ala Ser His Val Ser
340 345 350

Arg Tyr Gly Gly Ser Pro Arg Asp Pro Val Leu Thr Leu Arg Ala Phe
355 360 365

Ala Gly Pro Leu Ser Pro Ala Lys Ala Glu Asp Phe Arg Lys Leu Trp
370 375 380

Lys Thr Pro Pro Arg Glu Lys Ala Gly Phe Leu His His Val Lys Lys
385 390 395 400

Ser Asp Pro Glu Arg Gly Phe Glu Arg Val Gly Arg Glu Leu Ala His
405 410 415

Glu Leu Gly Tyr Pro Trp Val Glu Tyr Trp Glu Phe Leu Gly Cys Phe
420 425 430

Val Asp Leu Ser Ser Gln Glu Gly Leu Gln Arg Leu Glu Glu Tyr Leu
435 440 445

Thr Gln Gln Glu Ile Gly Lys Lys Ala Gln Gln Glu Thr Gly Glu Arg
450 455 460

Glu Ala Ser Cys Arg Asp Lys Ala Thr Thr Ser Gly Ser Asn Ser Ile
465 470 475 480

Ser Val Arg Ala Phe Leu Asp Glu Asp Asp Met Ser Leu Glu Glu Ile
485 490 495

Lys Asn Arg Gln Asn Ala Ala Arg Asn Asn Ser Pro Pro Thr Val Gly
500 505 510

Ala Phe Gly His Thr Arg Cys Ser Ala Phe Pro Leu Glu Gln Glu Ala
515 520 525

Asp Leu Ile Glu Ala Ala Glu Pro Gly Gly Pro His Ser Ser Arg Asn
530 535 540

Sequence listing as filed1.txt

Gly Leu Cys His Pro Leu Asn His Ser Arg Thr Leu Ala Gly Lys Arg
545 550 555 560

Pro Lys Ala Pro His Gly Glu Glu Ala His Leu Pro Pro Val Ser Asp
565 570 575

Leu Thr Val Glu Phe Asp Lys Leu Asn Leu Gln Asn Ile Gly Arg Ser
580 585 590

Val Ser Lys Thr Pro Asp Glu Ser Thr Lys Thr Lys Asp Gln Ile Leu
595 600 605

Thr Ser Arg Ile Asn Ala Val Glu Arg Asp Leu Leu Glu Pro Ser Pro
610 615 620

Ala Asp Gln Leu Gly Asn Gly His Arg Arg Thr Glu Ser Glu Met Ser
625 630 635 640

Ala Arg Ile Ala Lys Met Ser Leu Ser Pro Ser Ser Pro Arg His Glu
645 650 655

Asp Gln Leu Glu Val Thr Arg Glu Pro Ala Arg Arg Leu Phe Leu Phe
660 665 670

Gly Glu Glu Pro Ser Lys Leu Asp Gln Asp Val Leu Ala Ala Leu Glu
675 680 685

Cys Ala Asp Val Asp Pro His Gln Phe Pro Ala Val His Arg Trp Lys
690 695 700

Ser Ala Val Leu Cys Tyr Ser Pro Ser Asp Arg Gln Ser Trp Pro Ser
705 710 715 720

Pro Ala Val Lys Gly Arg Phe Lys Ser Gln Leu Pro Asp Leu Ser Gly
725 730 735

Pro His Ser Tyr Ser Pro Gly Arg Asn Ser Val Ala Gly Ser Asn Pro
740 745 750

Ala Lys Pro Gly Leu Gly Ser Pro Gly Arg Tyr Ser Pro Val His Gly
755 760 765

Ser Gln Leu Arg Arg Met Ala Arg Leu Ala Glu Leu Ala Ala Leu
770 775 780

<210> 183

Sequence listing as filed1.txt

<211> 972

<212> DNA

<213> Drosophila melanogaster

<400> 183

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agaacacacg gaacccgtat agtagtgccg ccctttattg gttttatctc aagtacgacg      180
cgataagatt tcgagcaact cgatcgcgga tcttcggaaa aaaaaaacat gaactccatc      240
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<210> 184

<211> 247

<212> PRT

<213> Drosophila melanogaster

<400> 184

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Leu Val Lys Ala Leu Leu Asn Leu Pro Gln Pro Pro Gln His Leu Phe
          20          25          30

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Sequence listing as filed1.txt

Thr Thr Cys Arg Asn Arg Glu Gln Ala Lys Glu Leu Glu Asp Leu Ala
35 40 45

Lys Asn His Ser Asn Ile His Ile Leu Glu Ile Asp Leu Arg Asn Phe
50 55 60

Asp Ala Tyr Asp Lys Leu Val Ala Asp Ile Glu Gly Val Thr Lys Asp
65 70 75 80

Gln Gly Leu Asn Val Leu Phe Asn Asn Ala Gly Ile Ala Pro Lys Ser
85 90 95

Ala Arg Ile Thr Ala Val Arg Ser Gln Glu Leu Leu Asp Thr Leu Gln
100 105 110

Thr Asn Thr Val Val Pro Ile Met Leu Ala Lys Ala Cys Leu Pro Leu
115 120 125

Leu Lys Lys Ala Ala Lys Ala Asn Glu Ser Gln Pro Met Gly Val Gly
130 135 140

Arg Ala Ala Ile Ile Asn Met Ser Ser Ile Leu Gly Ser Ile Gln Gly
145 150 155 160

Asn Thr Asp Gly Gly Met Tyr Ala Tyr Arg Thr Ser Lys Ser Ala Leu
165 170 175

Asn Ala Ala Thr Lys Ser Leu Ser Val Asp Leu Tyr Pro Gln Arg Ile
180 185 190

Met Cys Val Ser Leu His Pro Gly Trp Val Lys Thr Asp Met Gly Gly
195 200 205

Ser Ser Ala Pro Leu Asp Val Pro Thr Ser Thr Gly Gln Ile Val Gln
210 215 220

Thr Ile Ser Lys Leu Gly Glu Lys Gln Asn Gly Gly Phe Val Asn Tyr
225 230 235 240

Asp Gly Thr Pro Leu Ala Trp
245

<210> 185

<211> 2044

<212> DNA

Sequence listing as filed1.txt

<213> *Drosophila melanogaster*

<400> 185
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Sequence listing as filed1.txt

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cacc 2044

<210> 186

<211> 491

<212> PRT

<213> Drosophila melanogaster

<400> 186

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20 25 30

Ala Arg Val Ala Cys Leu Asp Phe Val Lys Pro Thr Pro Thr Leu Gly
35 40 45

Thr Lys Trp Gly Val Gly Gly Thr Cys Val Asn Val Gly Cys Ile Pro
50 55 60

Lys Lys Leu Met His Gln Ala Ser Leu Leu Gly Glu Ala Val His Glu
65 70 75 80

Ala Ala Ala Tyr Gly Trp Asn Val Asp Glu Lys Ile Lys Pro Asp Trp
85 90 95

His Lys Leu Val Gln Ser Val Gln Asn His Ile Lys Ser Val Asn Trp
100 105 110

Val Thr Arg Val Asp Leu Arg Asp Lys Lys Val Glu Tyr Ile Asn Gly
115 120 125

Leu Gly Ser Phe Val Asp Ser His Thr Leu Leu Ala Lys Leu Lys Ser
130 135 140

Gly Glu Arg Thr Ile Thr Ala Gln Thr Phe Val Ile Ala Val Gly Gly
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145         sequence.insert_as_predicate
150
155
160

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Sequence listing as filed1.txt

Thr Glu Phe Phe Ile Pro Gln Lys Ser Val Arg Tyr Cys Tyr Leu Lys
405 410 415

Ala Val Ala Glu Arg His Gly Asp Gln Arg Val Tyr Gly Leu His Tyr
420 425 430

Ile Gly Pro Val Ala Gly Glu Val Ile Gln Gly Phe Ala Ala Ala Leu
435 440 445

Lys Ser Gly Leu Thr Ile Asn Thr Leu Ile Asn Thr Val Gly Ile His
450 455 460

Pro Thr Thr Ala Glu Glu Phe Thr Arg Leu Ala Ile Thr Lys Arg Ser
465 470 475 480

Gly Leu Asp Pro Thr Pro Ala Ser Cys Cys Ser
485 490

<210> 187

<211> 2264

<212> DNA

<213> Drosophila melanogaster

<400> 187

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ggggaaaggc caacaagatg aacttgtgca attcgagatt ctccgttacg ttcgtgcggc	180
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aaaagatcaa gccagactgg cacaagctgg tgcagtccgt acagaaccac atcaagtccg	780
tcaactgggt gacccgtgtg gatctgcgcg acaagaaagt ggagtacatc aatggactgg	840

Sequence listing as filed1.txt

gctccttcgt ggactcgcac acactgctgg ccaagctgaa gagcggcgag cgcacaatca	900
ccgcccagac cttcgtcatt gccgttggcg gccgaccacg ttatccggat attcccgggtg	960
ctgtcgagta tggcatcacc agcgatgatc tggtcagttt ggaccgcgag cccggcaaga	1020
ccctggtggt gggagctggc tacattggct tggagtgcgc tggattcctg aagggctctcg	1080
gctacgagcc cactgtgatg gtgcgttcta ttgtgctgcg tggcttcgac cagcagatgg	1140
ccgagctggt ggcagcctcg atggaggagc gtggcattcc cttcctccgc aagacgggtgc	1200
cgctgtccgt ggaaaagcag gatgatggca agctgctcgt gaagtacaag aacgtggaga	1260
ccggcgagga ggccgaggat gtttacgaca ccgttctgtg ggccatcggc cgcaagggtc	1320
tggtggacga tctgaacctg cccaatgccg gcgtgactgt gcagaaggac aagattccag	1380
tggactccca ggaggctacc aatgtggcaa acatctacgc tgcggcgat atcatctatg	1440
gcaagccaga gctgacgccc gtcgccgttt tggctggccg tttgctggcc cgccgcctgt	1500
acggaggatc taccagcgc atggactaca aggatgtggc caccaccgtt ttcacgcccc	1560
tggagtacgc ctgcgtcggc ctgagcgagg aggatgccgt caagcagttc ggagccgatg	1620
agatcgagggt gttccacggc tactacaagc ccacggagtt cttcattccc cagaagagcg	1680
tgcgctactg ctacttgaag gctgtggccg agcgccatgg tgaccagcgc gtctatggac	1740
tgcactatat tggcccgggtg gccggtgagg ttatccaggg attcgctgcc gctttgaagt	1800
ctggcctgac tattaacacg ctgatcaaca ccgtgggcat ccatcccact accgccgaag	1860
aattcacccg gctggccatc accaagcgct ccggactgga cccacgccc gccagctgct	1920
gcagctaaag cgggaacgca gctcagccgc ctgggacgtg tcgaagccgc ttgctccacc	1980
cgaaatcccg tagatgaatg gttgttgtcg cggcccagcg atcgatgagt tcaatagttc	2040
cgtttcgttt ccacaattaa cacccaacac aatagctctg cgcaaggag gggcactggg	2100
cagcgatggc gggtggaacg acaccagtgg aactaccgc gcgaccagcc caaccacga	2160
ctgtgcgcc gccgacatgc actcaaaatt ttgaatttgt ttgaacctat gaaattaact	2220
atgaaatccc ctaaatgtac ggttgaagaa tataattttt cacc	2264

<210> 188

<211> 491

<212> PRT

<213> Drosophila melanogaster

<400> 188

Met	Ser	Thr	Lys	Gly	Gly	Ser	Tyr	Asp	Tyr	Asp	Leu	Ile	Val	Ile	Gly
1				5					10					15	

Sequence listing as filed1.txt

Gly Gly Ser Ala Gly Leu Ala Cys Ala Lys Glu Ala Val Leu Asn Gly
20 25 30

Ala Arg Val Ala Cys Leu Asp Phe Val Lys Pro Thr Pro Thr Leu Gly
35 40 45

Thr Lys Trp Gly Val Gly Gly Thr Cys Val Asn Val Gly Cys Ile Pro
50 55 60

Lys Lys Leu Met His Gln Ala Ser Leu Leu Gly Glu Ala Val His Glu
65 70 75 80

Ala Ala Ala Tyr Gly Trp Asn Val Asp Glu Lys Ile Lys Pro Asp Trp
85 90 95

His Lys Leu Val Gln Ser Val Gln Asn His Ile Lys Ser Val Asn Trp
100 105 110

Val Thr Arg Val Asp Leu Arg Asp Lys Lys Val Glu Tyr Ile Asn Gly
115 120 125

Leu Gly Ser Phe Val Asp Ser His Thr Leu Leu Ala Lys Leu Lys Ser
130 135 140

Gly Glu Arg Thr Ile Thr Ala Gln Thr Phe Val Ile Ala Val Gly Gly
145 150 155 160

Arg Pro Arg Tyr Pro Asp Ile Pro Gly Ala Val Glu Tyr Gly Ile Thr
165 170 175

Ser Asp Asp Leu Phe Ser Leu Asp Arg Glu Pro Gly Lys Thr Leu Val
180 185 190

Val Gly Ala Gly Tyr Ile Gly Leu Glu Cys Ala Gly Phe Leu Lys Gly
195 200 205

Leu Gly Tyr Glu Pro Thr Val Met Val Arg Ser Ile Val Leu Arg Gly
210 215 220

Phe Asp Gln Gln Met Ala Glu Leu Val Ala Ala Ser Met Glu Glu Arg
225 230 235 240

Gly Ile Pro Phe Leu Arg Lys Thr Val Pro Leu Ser Val Glu Lys Gln
245 250 255

Asp Asp Gly Lys Leu Leu Val Lys Tyr Lys Asn Val Glu Thr Gly Glu
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Sequence listing as filed1.txt

260

265

270

Glu Ala Glu Asp Val Tyr Asp Thr Val Leu Trp Ala Ile Gly Arg Lys
275 280 285

Gly Leu Val Asp Asp Leu Asn Leu Pro Asn Ala Gly Val Thr Val Gln
290 295 300

Lys Asp Lys Ile Pro Val Asp Ser Gln Glu Ala Thr Asn Val Ala Asn
305 310 315 320

Ile Tyr Ala Val Gly Asp Ile Ile Tyr Gly Lys Pro Glu Leu Thr Pro
325 330 335

Val Ala Val Leu Ala Gly Arg Leu Leu Ala Arg Arg Leu Tyr Gly Gly
340 345 350

Ser Thr Gln Arg Met Asp Tyr Lys Asp Val Ala Thr Thr Val Phe Thr
355 360 365

Pro Leu Glu Tyr Ala Cys Val Gly Leu Ser Glu Glu Asp Ala Val Lys
370 375 380

Gln Phe Gly Ala Asp Glu Ile Glu Val Phe His Gly Tyr Tyr Lys Pro
385 390 395 400

Thr Glu Phe Phe Ile Pro Gln Lys Ser Val Arg Tyr Cys Tyr Leu Lys
405 410 415

Ala Val Ala Glu Arg His Gly Asp Gln Arg Val Tyr Gly Leu His Tyr
420 425 430

Ile Gly Pro Val Ala Gly Glu Val Ile Gln Gly Phe Ala Ala Ala Leu
435 440 445

Lys Ser Gly Leu Thr Ile Asn Thr Leu Ile Asn Thr Val Gly Ile His
450 455 460

Pro Thr Thr Ala Glu Glu Phe Thr Arg Leu Ala Ile Thr Lys Arg Ser
465 470 475 480

Gly Leu Asp Pro Thr Pro Ala Ser Cys Cys Ser
485 490

<210> 189

<211> 1128

Sequence listing as filed1.txt

<212> DNA

<213> Homo sapiens

<400> 189

taagcttcgg gcgctgtagt acctgccagc tttcgccaca ggaggctgcc acctgtaggt	60
cacttgggct ccagctatgt ggctgcctct tctgctgggt gccttactct gggcagtgtct	120
gtggttgctc agggaccggc agagcctgcc cgccagcaat gcctttgtct tcatcaccgg	180
ctgtgactca ggctttgggc gccttctggc actgcagctg gaccagagag gcttccgagt	240
cctggccagc tgcctgaccc cctccggggc cgaggacctg cagcgggtgg cctcctcccg	300
cctccacacc accctgttgg atatcactga tccccagagc gtccagcagg cagccaagtg	360
ggtggagatg cacgttaagg aagcagggtt ttttggctct gtgaataatg ctggtgtggc	420
tggtatcatc ggaccacac catggctgac ccgggacgat ttccagcggg tgctgaatgt	480
gaacacaatg ggtcccatcg gggtcaccct tgccctgctg cctctgctgc agcaagcccg	540
gggccgggtg atcaacatca ccagcgtcct gggtcgcctg gcagccaatg gtgggggcta	600
ctgtgtctcc aaatttggcc tggaggcctt ctctgacagc ctgaggcggg atgtagctca	660
ttttgggata cgagtctcca tcgtggagcc tggcttcttc cgaacccttg tgaccaacct	720
ggagagtctg gagaaaaccc tgcaggcctg ctgggcacgg ctgcctcctg ccacacaggc	780
ccactatggg ggggccttcc tcaccaagta cctgaaaatg caacagcgca tcatgaacct	840
gatctgtgac ccggacctaa ccaagggtgag ccgatgcctg gagcatgccc tgactgctcg	900
acacccccga acccgctaca gcccagggtg ggatgccaag ctgctctggc tgcctgcctc	960
ctacctgcca gccagcctgg tggatgctgt gctcacctgg gtccttccca agcctgcca	1020
agcagtctac tgaatccagc ctccagcaa gagattgttt ttcaaggaca aggactttga	1080
tttatttctg cccccaccct ggtactgcct ggtgcctgcc aaaaaata	1128

<210> 190

<211> 318

<212> PRT

<213> Homo sapiens

<400> 190

Met	Trp	Leu	Pro	Leu	Leu	Leu	Gly	Ala	Leu	Leu	Trp	Ala	Val	Leu	Trp
1				5					10					15	

Leu	Leu	Arg	Asp	Arg	Gln	Ser	Leu	Pro	Ala	Ser	Asn	Ala	Phe	Val	Phe
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Sequence listing as filed1.txt

20

25

30

Ile Thr Gly Cys Asp Ser Gly Phe Gly Arg Leu Leu Ala Leu Gln Leu
35 40 45

Asp Gln Arg Gly Phe Arg Val Leu Ala Ser Cys Leu Thr Pro Ser Gly
50 55 60

Ala Glu Asp Leu Gln Arg Val Ala Ser Ser Arg Leu His Thr Thr Leu
65 70 75 80

Leu Asp Ile Thr Asp Pro Gln Ser Val Gln Gln Ala Ala Lys Trp Val
85 90 95

Glu Met His Val Lys Glu Ala Gly Leu Phe Gly Leu Val Asn Asn Ala
100 105 110

Gly Val Ala Gly Ile Ile Gly Pro Thr Pro Trp Leu Thr Arg Asp Asp
115 120 125

Phe Gln Arg Val Leu Asn Val Asn Thr Met Gly Pro Ile Gly Val Thr
130 135 140

Leu Ala Leu Leu Pro Leu Leu Gln Gln Ala Arg Gly Arg Val Ile Asn
145 150 155 160

Ile Thr Ser Val Leu Gly Arg Leu Ala Ala Asn Gly Gly Gly Tyr Cys
165 170 175

Val Ser Lys Phe Gly Leu Glu Ala Phe Ser Asp Ser Leu Arg Arg Asp
180 185 190

Val Ala His Phe Gly Ile Arg Val Ser Ile Val Glu Pro Gly Phe Phe
195 200 205

Arg Thr Pro Val Thr Asn Leu Glu Ser Leu Glu Lys Thr Leu Gln Ala
210 215 220

Cys Trp Ala Arg Leu Pro Pro Ala Thr Gln Ala His Tyr Gly Gly Ala
225 230 235 240

Phe Leu Thr Lys Tyr Leu Lys Met Gln Gln Arg Ile Met Asn Leu Ile
245 250 255

Cys Asp Pro Asp Leu Thr Lys Val Ser Arg Cys Leu Glu His Ala Leu
260 265 270

Sequence listing as filed1.txt

Thr Ala Arg His Pro Arg Thr Arg Tyr Ser Pro Gly Trp Asp Ala Lys
275 280 285

Leu Leu Trp Leu Pro Ala Ser Tyr Leu Pro Ala Ser Leu Val Asp Ala
290 295 300

Val Leu Thr Trp Val Leu Pro Lys Pro Ala Gln Ala Val Tyr
305 310 315

<210> 191

<211> 2025

<212> DNA

<213> Homo sapiens

<400> 191

ccggacctca	ggcccagttc	agtgtacttc	ccctctctac	ttcctccctc	cagtcacctc	60
tccatccctc	ccttttttgg	ctgccccttg	cctgccttcc	tcgccagtag	cttgagaggt	120
agacacgatg	acaccttttg	caggctaaaa	aggctgagag	tggcactatg	tgcagtgagc	180
caccatggag	gaccaagcag	gtcagcggga	ctatgatctc	ctggtgggtc	gcgggggatc	240
tgggtggcctg	gcttggtgcca	aggaggccgc	ccagctggga	aggaagggtg	ccgtgggtgga	300
ctacgtggaa	ccttctcccc	aaggcaccgc	gtggggcctc	ggcggcacct	gcgtcaacgt	360
gggctgcatc	cccagaagc	tgatgcacca	ggcggcactg	ctgggaggcc	tgatccaaga	420
tgccccaac	tatgggtggg	agggtggcca	gcccgtgccg	catgactgga	ggaagatggc	480
agaagctgtt	caaaatcacg	tgaaatcctt	gaactggggc	caccgtgtcc	agcttcagga	540
cagaaaagtc	aagtacttta	acatcaaagc	cagctttgtt	gacgagcaca	cggtttgctg	600
cgttgccaaa	ggtgggaaag	agattctgct	gtcagccgat	cacatcatca	ttgctactgg	660
agggcggccg	agatacccca	cgcacatcga	agggtgcctt	gaatatggaa	tcacaagtga	720
tgacatcttc	tggctgaagg	aatccccttg	aaaaacgttg	gtggtcgggg	ccagctatgt	780
ggccctggag	tgtgctggct	tcctcaccgg	gattgggctg	gacaccacca	tcatgatgcg	840
cagcatcccc	ctccgcggct	tcgaccagca	aatgtcctcc	atggcatag	agcacatggc	900
atctcatggc	acccggttcc	tgaggggctg	tgccccctcg	cgggtcagga	ggctccctga	960
tggccagctg	cagggtcacct	gggaggacag	caccaccggc	aaggaggaca	cgggcacctt	1020
tgacaccgtc	ctgtggggcca	taggtcgagt	cccagacacc	agaagtctga	atttgagaaa	1080
ggctggggta	gatactagcc	ccgacactca	gaagatcctg	gtggactccc	gggaagccac	1140
ctctgtgccc	cacatctacg	ccattgggtga	cgtgggtggag	gggcggcctg	agctgacacc	1200

Sequence listing as filed1.txt

catagcgatc atggccggga ggctcctggt gcagcggctc ttcggcgggt cctcagatct	1260
gatggactac gacaatgttc ccacgaccgt cttcaccctg ctggagtatg gctgtgtggg	1320
gctgtccgag gaggaggcag tggctcgcca cgggcaggag catgttgagg tctatcacgc	1380
ccattataaa cactggagt tcacggtggc tggacgagat gcatcccagt gttatgtaaa	1440
gatggtgtgc ctgagggagc cccacagct ggtgctgggc ctgcatttcc ttggcccaa	1500
cgcaggcgaa gttactcaag gatttgctct ggggatcaag tgtggggctt cctatgcgca	1560
ggtgatgcgg accgtgggta tccatccac atgctctgag gaggtagtca agctgcgcat	1620
ctccaagcgc tcaggcctgg accccacggt gacaggctgc tgagggtgaa cgccatccct	1680
gcaggccagg gcacacggtg cggccgccc cagctcctc gaggccagac ccaggatggc	1740
tgcaggccag gtttgggggg cctcaaccct ctcttgagc gcctgtgaga tggtcagcgt	1800
ggagcgcaag tgctggacag gtggcccgtg tgccccacag ggatggctca ggggactgtc	1860
cacctaccc ctgcacctct cagcctctgc cgccgggcac cccccccag gctcctgggtg	1920
ccagatgatg acgacctggg tggaaacctt ccctgtgggc acccatgtcc gagccccctg	1980
gcatttctgc aatgcaaata aagagggtac ttttctgaa gtgtg	2025

<210> 192

<211> 494

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (493)..(493)

<223> Xaa is uncertain

<400> 192

Met	Glu	Asp	Gln	Ala	Gly	Gln	Arg	Asp	Tyr	Asp	Leu	Leu	Val	Val	Gly
1				5				10					15		

Gly	Gly	Ser	Gly	Gly	Leu	Ala	Cys	Ala	Lys	Glu	Ala	Ala	Gln	Leu	Gly
			20					25					30		

Arg	Lys	Val	Ala	Val	Val	Asp	Tyr	Val	Glu	Pro	Ser	Pro	Gln	Gly	Thr
		35					40				45				

Sequence listing as filed1.txt

Arg Trp Gly Leu Gly Gly Thr Cys Val Asn Val Gly Cys Ile Pro Lys
50 55 60

Lys Leu Met His Gln Ala Ala Leu Leu Gly Gly Leu Ile Gln Asp Ala
65 70 75 80

Pro Asn Tyr Gly Trp Glu Val Ala Gln Pro Val Pro His Asp Trp Arg
85 90 95

Lys Met Ala Glu Ala Val Gln Asn His Val Lys Ser Leu Asn Trp Gly
100 105 110

His Arg Val Gln Leu Gln Asp Arg Lys Val Lys Tyr Phe Asn Ile Lys
115 120 125

Ala Ser Phe Val Asp Glu His Thr Val Cys Gly Val Ala Lys Gly Gly
130 135 140

Lys Glu Ile Leu Leu Ser Ala Asp His Ile Ile Ile Ala Thr Gly Gly
145 150 155 160

Arg Pro Arg Tyr Pro Thr His Ile Glu Gly Ala Leu Glu Tyr Gly Ile
165 170 175

Thr Ser Asp Asp Ile Phe Trp Leu Lys Glu Ser Pro Gly Lys Thr Leu
180 185 190

Val Val Gly Ala Ser Tyr Val Ala Leu Glu Cys Ala Gly Phe Leu Thr
195 200 205

Gly Ile Gly Leu Asp Thr Thr Ile Met Met Arg Ser Ile Pro Leu Arg
210 215 220

Gly Phe Asp Gln Gln Met Ser Ser Met Val Ile Glu His Met Ala Ser
225 230 235 240

His Gly Thr Arg Phe Leu Arg Gly Cys Ala Pro Ser Arg Val Arg Arg
245 250 255

Leu Pro Asp Gly Gln Leu Gln Val Thr Trp Glu Asp Ser Thr Thr Gly
260 265 270

Lys Glu Asp Thr Gly Thr Phe Asp Thr Val Leu Trp Ala Ile Gly Arg
275 280 285

Val Pro Asp Thr Arg Ser Leu Asn Leu Glu Lys Ala Gly Val Asp Thr
290 295 300

Sequence listing as filed1.txt

Ser Pro Asp Thr Gln Lys Ile Leu Val Asp Ser Arg Glu Ala Thr Ser
305 310 315 320

Val Pro His Ile Tyr Ala Ile Gly Asp Val Val Glu Gly Arg Pro Glu
325 330 335

Leu Thr Pro Ile Ala Ile Met Ala Gly Arg Leu Leu Val Gln Arg Leu
340 345 350

Phe Gly Gly Ser Ser Asp Leu Met Asp Tyr Asp Asn Val Pro Thr Thr
355 360 365

Val Phe Thr Pro Leu Glu Tyr Gly Cys Val Gly Leu Ser Glu Glu Glu
370 375 380

Ala Val Ala Arg His Gly Gln Glu His Val Glu Val Tyr His Ala His
385 390 395 400

Tyr Lys Pro Leu Glu Phe Thr Val Ala Gly Arg Asp Ala Ser Gln Cys
405 410 415

Tyr Val Lys Met Val Cys Leu Arg Glu Pro Pro Gln Leu Val Leu Gly
420 425 430

Leu His Phe Leu Gly Pro Asn Ala Gly Glu Val Thr Gln Gly Phe Ala
435 440 445

Leu Gly Ile Lys Cys Gly Ala Ser Tyr Ala Gln Val Met Arg Thr Val
450 455 460

Gly Ile His Pro Thr Cys Ser Glu Glu Val Val Lys Leu Arg Ile Ser
465 470 475 480

Lys Arg Ser Gly Leu Asp Pro Thr Val Thr Gly Cys Xaa Gly
485 490

<210> 193

<211> 2645

<212> DNA

<213> Drosophila melanogaster

<400> 193

ctttggcttg tttgcttgaa aaaacgtaac tttttttgtt gtaatgaagg aagcagcacg 60

ggcagtagac caactcgaaa tcgcgcattg ccaacacgta acgtaccagc ccgtgtaata 120

Sequence listing as filed1.txt

acagaagaaa ccccgagccg caacaacaac ccccgaaaag cggtagttgt aagagttttc	180
ccaaagtggc agcggcaatt acacggcgag aaacgagttc gcgtcgcgtc cagctgtttg	240
aaaatcaaaa ttaaccgttt ttagcgcgtg aaacaagacg tttagaaccg tggtcaaaat	300
ccctcgtaca taaattgtgt gtacatttat atatatatat attttctacg ccacgttaac	360
cagacttttt aagttttaaa ttaaaactaa agacgtatta tttttttttt tttgagtgtt	420
tatatttttt tttttgcaag ttttgtttgg ttacatttga gtttgtgttg agtttttgcc	480
agccaaaggc gcttaagatg tttagtcccg agtacgagaa gcgcacccctg aagcactaca	540
gtcctgtggc acggaatctg ttcaacaact tcgagtcgtc cactacgccc acatctctcg	600
accgcttcat accctgcaga gcgtacaaca actggcagac gaactttgcg tcaatcaaca	660
agtccaatga caactcgccg cagacgagta agaagcagcg ggactgcggg gaaacggcac	720
gcgatagtct cgcctactcc tgcctactga agaacgagct cctcggatcg gcaatcgacg	780
acgtgaagac cgccggcgag gagcggaatg agaatgccta cacgccggcc gcaaagcgga	840
gtctcttcaa gtaccagtca cccaccaagc aggactacaa tggcgagtgt ccgtactcgt	900
tgtcacccgt cagcgccaaa agtcagaagc tgttgcgatc gccgcgcaag gctacgcgca	960
aaatctctcg cattcccttc aagggtgctag acgcgcccga gttgcaggac gacttctatc	1020
tgaacctggt cgactggctg tcgcagaacg tactggctgt aggctgggc agctgtgtct	1080
atctgtggag cgctgacacc agtcagggtta cccgcctgtg tgatctcagt ccggatgcga	1140
atacggtgac ctcgggtgctg tggaacgagc gtggcaacac cgtggccgtg ggacacatc	1200
acggctacgt gaccgtctgg gatgtggcgg ccaataagca gatcaacaaa ctgaatggcc	1260
attcggcgcg tgtgggcgcc ttggcatgga acagtgcacat cctgtcgcgcg gggtcgcgag	1320
accgttggat catacagcgg gatacgagaa cgccgcaact gcaatcggag cgagattgg	1380
ccggacatcg gcaggagggtg tgcggactga aatggtcacc ggataatcaa tacttggcca	1440
gtggcggcaa cgataatcgg ttgtatgtgt ggaatcagca ttccgtgaat cccgtacaat	1500
catacacgga gcatatggcg gctgtaaagg cgatcgcgtg gtcgccgcac caccacggac	1560
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gccagcccat gcagtgcgtg gacacgggct cgcaggtttg caatctggcc tgggtccaagc	1680
actcctcgga gctggtctcc acgcacggct actcgcagaa ccagatactc gtgtggaaat	1740
atccctccct gacgcaagtg gccaaagctga cgggccattc gtatcgtgtg ctctatctgg	1800
cgctgagtcc cgatggtgag gctattgtta cgggcgccgg cgacgagacg ctgcatgttt	1860
ggaacgtatt cagcaaggcg cgagtcaga aggagaacaa gtccgttctg aatctgtttg	1920
ccaatatcag ataaggacaa taactccaag cgagcgaaga ctgagcgagc gccaaaggca	1980

Sequence listing as filed1.txt

aacacaacac aacacaaaac aaaacaaaac aaagcaaagt ataatatataa taaaatggat	2040
acttgaaacc gaaaaacaaa gccaaccaac caatcagcaa aaaccaagct gaagctaaca	2100
aactaatcga gcctatatgc tatatatata caaacgattc ttgttcagca gtcgttttgt	2160
aaattgttgt gtgacccac agcagcaata gattaaataa atttaagtta agcaatctgt	2220
atagaacggt aattagcaac atttacgtag gtaaacacat gcaatttatg aaggaataac	2280
atcaagagag atggctgaaa caagaactga aaatgaaact aagtctatgg aaattgtaag	2340
taattggaaa atcaacaaca ccacactcac acactatctt taatcgacat tttttgttgc	2400
tgctttttta aatgtattgt tttttttttg tggtagacac acactacacc taagaaaatt	2460
ggatacccct acatatatcat ttatacgttt atatatatat atttttttgc tagcctctaa	2520
gtaactaact ttatttcaag caaacattta tacacatatt tcgctcacta gaaacactca	2580
tacccccgaa aacacaatgt atattaaata aacttatata atttcaaaat gtgccccaaa	2640
aagta	2645

<210> 194

<211> 478

<212> PRT

<213> Drosophila melanogaster

<400> 194

Met	Phe	Ser	Pro	Glu	Tyr	Glu	Lys	Arg	Ile	Leu	Lys	His	Tyr	Ser	Pro
1				5					10					15	

Val	Ala	Arg	Asn	Leu	Phe	Asn	Asn	Phe	Glu	Ser	Ser	Thr	Thr	Pro	Thr
			20					25					30		

Ser	Leu	Asp	Arg	Phe	Ile	Pro	Cys	Arg	Ala	Tyr	Asn	Asn	Trp	Gln	Thr
		35					40					45			

Asn	Phe	Ala	Ser	Ile	Asn	Lys	Ser	Asn	Asp	Asn	Ser	Pro	Gln	Thr	Ser
	50					55					60				

Lys	Lys	Gln	Arg	Asp	Cys	Gly	Glu	Thr	Ala	Arg	Asp	Ser	Leu	Ala	Tyr
65					70					75					80

Ser	Cys	Leu	Leu	Lys	Asn	Glu	Leu	Leu	Gly	Ser	Ala	Ile	Asp	Asp	Val
				85					90					95	

Lys	Thr	Ala	Gly	Glu	Glu	Arg	Asn	Glu	Asn	Ala	Tyr	Thr	Pro	Ala	Ala
			100					105					110		

Sequence listing as filed1.txt

Lys Arg Ser Leu Phe Lys Tyr Gln Ser Pro Thr Lys Gln Asp Tyr Asn
115 120 125

Gly Glu Cys Pro Tyr Ser Leu Ser Pro Val Ser Ala Lys Ser Gln Lys
130 135 140

Leu Leu Arg Ser Pro Arg Lys Ala Thr Arg Lys Ile Ser Arg Ile Pro
145 150 155 160

Phe Lys Val Leu Asp Ala Pro Glu Leu Gln Asp Asp Phe Tyr Leu Asn
165 170 175

Leu Val Asp Trp Ser Ser Gln Asn Val Leu Ala Val Gly Leu Gly Ser
180 185 190

Cys Val Tyr Leu Trp Ser Ala Cys Thr Ser Gln Val Thr Arg Leu Cys
195 200 205

Asp Leu Ser Pro Asp Ala Asn Thr Val Thr Ser Val Ser Trp Asn Glu
210 215 220

Arg Gly Asn Thr Val Ala Val Gly Thr His His Gly Tyr Val Thr Val
225 230 235 240

Trp Asp Val Ala Ala Asn Lys Gln Ile Asn Lys Leu Asn Gly His Ser
245 250 255

Ala Arg Val Gly Ala Leu Ala Trp Asn Ser Asp Ile Leu Ser Ser Gly
260 265 270

Ser Arg Asp Arg Trp Ile Ile Gln Arg Asp Thr Arg Thr Pro Gln Leu
275 280 285

Gln Ser Glu Arg Arg Leu Ala Gly His Arg Gln Glu Val Cys Gly Leu
290 295 300

Lys Trp Ser Pro Asp Asn Gln Tyr Leu Ala Ser Gly Gly Asn Asp Asn
305 310 315 320

Arg Leu Tyr Val Trp Asn Gln His Ser Val Asn Pro Val Gln Ser Tyr
325 330 335

Thr Glu His Met Ala Ala Val Lys Ala Ile Ala Trp Ser Pro His His
340 345 350

His Gly Leu Leu Ala Ser Gly Gly Gly Thr Ala Asp Arg Cys Ile Arg

Sequence listing as filed1.txt

355

360

365

Phe Trp Asn Thr Leu Thr Gly Gln Pro Met Gln Cys Val Asp Thr Gly
370 375 380

Ser Gln Val Cys Asn Leu Ala Trp Ser Lys His Ser Ser Glu Leu Val
385 390 395 400

Ser Thr His Gly Tyr Ser Gln Asn Gln Ile Leu Val Trp Lys Tyr Pro
405 410 415

Ser Leu Thr Gln Val Ala Lys Leu Thr Gly His Ser Tyr Arg Val Leu
420 425 430

Tyr Leu Ala Leu Ser Pro Asp Gly Glu Ala Ile Val Thr Gly Ala Gly
435 440 445

Asp Glu Thr Leu Arg Phe Trp Asn Val Phe Ser Lys Ala Arg Ser Gln
450 455 460

Lys Glu Asn Lys Ser Val Leu Asn Leu Phe Ala Asn Ile Arg
465 470 475

<210> 195

<211> 2978

<212> DNA

<213> Homo sapiens

<400> 195

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ggccgagccc	tgccctgcca	tggaccagga	ctatgagcgg	cgccctgcttc	gccagatcgt	180
catccagaat	gagaacacga	tgccacgcgt	cacagagatg	cggcggaccc	tgacgcctgc	240
cagctcccca	gtgtcctcgc	ccagcaagca	cggagaccgc	ttcatcccct	ccagagccgg	300
agccaactgg	agcgtgaact	tccacaggat	taacgagaat	gagaagtctc	ccagtcagaa	360
ccggaaagcc	aaggacgcca	cctcagacaa	cggcaaagac	ggcctggcct	actctgcctt	420
gctcaagaat	gagctgctgg	gtgccggcat	cgagaagggtg	caggacccgc	agactgagga	480
ccgcaggctg	cagccctcca	cgccctgagaa	gaagggtctg	ttcacgtatt	cccttagcac	540
caagcgctcc	agccccgatg	acggcaacga	tgtgtctccc	tactccctgt	ctcccgtcag	600
caacaagagc	cagaagctgc	tccgggtcccc	ccggaaaccc	acccgcaaga	tctccaagat	660

Sequence listing as filed1.txt

cccccttcaag gtgctggacg cgcccagagct gcaggacgac ttctacctca atctggtgga	720
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ctgtaccagc caggtgacgc ggctctgtga cctctcagtg gaaggggact cagtgacctc	840
cgtgggctgg tctgagcggg ggaacctggg ggcgggtggg acacacaagg gcttcgtgca	900
gatctgggac gcagccgcag ggaagaagct gtccatgttg gagggccaca cggcacgcgt	960
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cctggcgggc gtgaaggcca tcgcctgggc ccacatcag cacgggctgc tggcctcggg	1260
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gtgtatcgac acgggctccc aagtgtgcaa tctggcctgg tccaagcacg ccaacgagct	1380
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ccagtatctg ggggtggcac gtggtcgggg accctcagca gcaggggctc tgtctccctt	1860
cccaaagggc gagaaccaca ttggacgggc ccggctcaga ccgtctgtac tcagagcgac	1920
ggatgcccc tgggaccctc actgcctccg tctgttcac acctgcccac cggagccgca	1980
tgctcttcct ggaactgccc acgtctgcac agaacagacc accagacgcc agggctgatt	2040
ggtggggggc tgagaccccg gttgccatt catggctgca cccaccatg tcaaaccxaa	2100
gaccagcccc aaggccagac caaggcatgt aggcctggg aggtggctcg gggccactgg	2160
cggagccagc ctgtggatcc aagagacagt cccacactgg gcttcacggc atccttgag	2220
ccacctctgc tgtcactgct cgaagcagca gtctctctgg aagcatctgt gtcattggca	2280
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caactggagga ggatgtctgc tctggactta tcacccagg agaactgaac ccggacctgc	2400
tactgcccct ggctggagag gagcacaaca gatgccacgt cttcgtgcat tcgccaacac	2460
gtgccctcac agggccagcg tcctccttcc ctgcgcaaga cttgcgtccc ccatgcctgc	2520

Sequence listing as filed1.txt

tggttggtg	ggcctgtgg	aggccagcag	cggtgtggcc	cccgcccca	ggctgcctgt	2580
gtcttcacct	gtcctgtcca	ccagcgccaa	cagccgtggg	gaagccaagg	agaccaagg	2640
ggccaggag	gtggcgccc	tccatccttc	gagaagcttc	ccaggctcct	ctgcttctct	2700
gtctcatgct	cccaggctgc	acagcaggca	gggaggagg	caaggcaggg	gagtggggcc	2760
tgagctgagc	actgccccct	caccccccca	ccacccttc	ccatttcac	gggggggacg	2820
tgagagggt	ggggcgggct	gggggtggag	gggtccacc	accaccctgc	tgtgcttggg	2880
aacccccact	ccccactccc	cacatcccaa	catcctggtg	tctgtcccca	gtgggggttg	2940
cggtcatgtg	tacatatgta	tttgtgactt	ttctttgg			2978

<210> 196

<211> 493

<212> PRT

<213> Homo sapiens

<400> 196

Met	Asp	Gln	Asp	Tyr	Glu	Arg	Arg	Leu	Leu	Arg	Gln	Ile	Val	Ile	Gln
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Asn	Glu	Asn	Thr	Met	Pro	Arg	Val	Thr	Glu	Met	Arg	Arg	Thr	Leu	Thr
			20					25					30		
Pro	Ala	Ser	Ser	Pro	Val	Ser	Ser	Pro	Ser	Lys	His	Gly	Asp	Arg	Phe
		35					40					45			
Ile	Pro	Ser	Arg	Ala	Gly	Ala	Asn	Trp	Ser	Val	Asn	Phe	His	Arg	Ile
	50				55						60				
Asn	Glu	Asn	Glu	Lys	Ser	Pro	Ser	Gln	Asn	Arg	Lys	Ala	Lys	Asp	Ala
65					70				75					80	
Thr	Ser	Asp	Asn	Gly	Lys	Asp	Gly	Leu	Ala	Tyr	Ser	Ala	Leu	Leu	Lys
			85					90					95		
Asn	Glu	Leu	Leu	Gly	Ala	Gly	Ile	Glu	Lys	Val	Gln	Asp	Pro	Gln	Thr
		100						105					110		
Glu	Asp	Arg	Arg	Leu	Gln	Pro	Ser	Thr	Pro	Glu	Lys	Lys	Gly	Leu	Phe
	115						120					125			
Thr	Tyr	Ser	Leu	Ser	Thr	Lys	Arg	Ser	Ser	Pro	Asp	Asp	Gly	Asn	Asp
	130					135					140				

Sequence listing as filed1.txt

Val Ser Pro Tyr Ser Leu Ser Pro Val Ser Asn Lys Ser Gln Lys Leu
 145 150 155 160
 Leu Arg Ser Pro Arg Lys Pro Thr Arg Lys Ile Ser Lys Ile Pro Phe
 165 170 175
 Lys Val Leu Asp Ala Pro Glu Leu Gln Asp Asp Phe Tyr Leu Asn Leu
 180 185 190
 Val Asp Trp Ser Ser Leu Asn Val Leu Ser Val Gly Leu Gly Thr Cys
 195 200 205
 Val Tyr Leu Trp Ser Ala Cys Thr Ser Gln Val Thr Arg Leu Cys Asp
 210 215 220
 Leu Ser Val Glu Gly Asp Ser Val Thr Ser Val Gly Trp Ser Glu Arg
 225 230 235 240
 Gly Asn Leu Val Ala Val Gly Thr His Lys Gly Phe Val Gln Ile Trp
 245 250 255
 Asp Ala Ala Ala Gly Lys Lys Leu Ser Met Leu Glu Gly His Thr Ala
 260 265 270
 Arg Val Gly Ala Leu Ala Trp Asn Ala Glu Gln Leu Ser Ser Gly Ser
 275 280 285
 Arg Asp Arg Met Ile Leu Gln Arg Asp Ile Arg Thr Pro Pro Leu Gln
 290 295 300
 Ser Glu Arg Arg Leu Gln Gly His Arg Gln Glu Val Cys Gly Leu Lys
 305 310 315 320
 Trp Ser Thr Asp His Gln Leu Leu Ala Ser Gly Gly Asn Asp Asn Lys
 325 330 335
 Leu Leu Val Trp Asn His Ser Ser Leu Ser Pro Val Gln Gln Tyr Thr
 340 345 350
 Glu His Leu Ala Ala Val Lys Ala Ile Ala Trp Ser Pro His Gln His
 355 360 365
 Gly Leu Leu Ala Ser Gly Gly Gly Thr Ala Asp Arg Cys Ile Arg Phe
 370 375 380
 Trp Asn Thr Leu Thr Gly Gln Pro Leu Gln Cys Ile Asp Thr Gly Ser
 Page 240

Sequence listing as filed1.txt

385 390 395 400

Gln Val Cys Asn Leu Ala Trp Ser Lys His Ala Asn Glu Leu Val Ser
405 410 415

Thr His Gly Tyr Ser Gln Asn Gln Ile Leu Val Trp Lys Tyr Pro Ser
420 425 430

Leu Thr Gln Val Ala Lys Leu Thr Gly His Ser Tyr Arg Val Leu Tyr
435 440 445

Leu Ala Met Ser Pro Asp Gly Glu Ala Ile Val Thr Gly Ala Gly Asp
450 455 460

Glu Thr Leu Arg Phe Trp Asn Val Phe Ser Lys Thr Arg Ser Thr Lys
465 470 475 480

Glu Ser Val Ser Val Leu Asn Leu Phe Thr Arg Ile Arg
485 490

<210> 197

<211> 3518

<212> DNA

<213> Drosophila melanogaster

<400> 197

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cgtattatag ccagggaaca gctgtgctgt tgccattggc caacagttgt tgtccacttc	180
gcaattacca agccatccaa aatcggctgt ttaacgcgcg cttgattgga tatttatgaa	240
caattcagtg caccaggatg tcgcaggaca ggatcgccgg catcgatgtg gcaaccaatt	300
ccactgatat atcgaatatc attaacgaga tgatcatctg catcaagggc aagcagatgc	360
ccgaagtcca cgaaaaagca atggatcatt taagcaaat gattgccgcc aatagtcggg	420
tcattcggga ctcaaatatg ttgactgagc gcgaatgtgt ccagaagata atgaaactgc	480
tgagcgcccc gaataagaag gaggaggga aaactgtgtc ggatcacttc aatgagctgt	540
acaggaaact cacgttgacc aagtgcgatc cgcacatgag gcactcgcta atgacccatc	600
tacttacgat gaccgacaat tcggatgccg aaaaggcagt tgccagcgaa gatccacgta	660
ctcagtgcga taatctcact cagattctgg tcagtcgtct taactcaata agttcctcca	720
tagccagtct gaatgagatg ggagtggatc acggaaatgg agtaggagca gcagcggtaa	780

Sequence listing as filed1.txt

caggagcagc agcggtaaca ggagcagcag cggtaacagg agcagcagcg gtaacaggag	840
cagcagcaag ccacagttat gatgccacac agtccagcat cggattgaga aaacagtcct	900
tgcccaacta cctggatgca acaaagatgt tgcccagagtc tcgacatgat atagtgatga	960
gtgccattta ctcttcacc ggcgttcaag ggaagtatit gaagaaggat gtggtaacgg	1020
gccgtttcaa gctggatcag cagaacatca agttcctgac caccggccaa gcgggcatgt	1080
tgctgcggct ctccgaactt ggctactacc acgatcgagt ggtcaagttt tcggatgtat	1140
cgaccggttt caatgccatt ggcagcatgg gccaggccct gatttccaaa ctcaaggagg	1200
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tttatgattt ccttgacaac ggtaacgata tggtaataaa attgggtggag gatctcctaa	1500
ctgccatttg tggcccactg gtgcgcatga tctccaaatg gattctggag ggcggcatta	1560
gcgatatgca tagagagttc tttgtgaagt ccattaaaga tgtgggcggt gatcggctat	1620
ggcacgataa attccgccta cgattgcaa tgctgcccac gtttggtgccc atggatatgg	1680
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tgaagaacga actggagcga ccgggacctg atatatatgc taacgatctc acctccatgt	2040
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aggctactac gttggacgaa atcctggaag ctacagagaa gtttctgcaa acgattttgg	2520
tgggctgttt tgtcagcaac aaagcgagtg tggagcattc gctggaggtg gtgtacgaga	2580
acattatcga attggagaag tggcagtcga gcttttaca ggactgcttt aaggagctaa	2640

Sequence listing as filed1.txt

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acatcgccctg ccgcggctta gaagtcatag caaccgatta cgaaaaggct gtcagcactt	2820
tcctaattgtc tctcaactct agcgcgcatc cgaatttgca gctctttggc actcggctgg	2880
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agatatctcg atatcattgg agccaatcca accaaacaaa ctaatccaat tattaactaa	3180
gccttcgaat cgaaaacaac ctctatacat atatatctca agctttgccg tcaatcgcct	3240
ggctgcaagc catcaactta agatatctcc aatacaaaaat tattgagtag ttgtaacgaa	3300
agtattaagc gacaatttgt ttgtcgaaaa acgcaacgtt ctattttgtt tgcgaatccc	3360
ataatTTTTT ttacatcgaa gcttagttga aatagatttt cgtaagtga tttgccaatt	3420
gccatgttgt aattaaagag aataagagaa tgttacgtac tttaaaagaa tgttttaaaa	3480
aagttaatgt tttgaacagt tttaaaccgt aatgcgag	3518

<210> 198

<211> 917

<212> PRT

<213> Drosophila melanogaster

<400> 198

Met	Ser	Gln	Asp	Arg	Ile	Ala	Gly	Ile	Asp	Val	Ala	Thr	Asn	Ser	Thr
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Asp	Ile	Ser	Asn	Ile	Ile	Asn	Glu	Met	Ile	Ile	Cys	Ile	Lys	Gly	Lys
			20					25					30		
Gln	Met	Pro	Glu	Val	His	Glu	Lys	Ala	Met	Asp	His	Leu	Ser	Lys	Met
		35					40					45			
Ile	Ala	Ala	Asn	Ser	Arg	Val	Ile	Arg	Asp	Ser	Asn	Met	Leu	Thr	Glu
	50					55					60				
Arg	Glu	Cys	Val	Gln	Lys	Ile	Met	Lys	Leu	Leu	Ser	Ala	Arg	Asn	Lys
65					70				75					80	

Sequence listing as filed1.txt

Lys Glu Glu Gly Lys Thr Val Ser Asp His Phe Asn Glu Leu Tyr Arg
85 90 95

Lys Leu Thr Leu Thr Lys Cys Asp Pro His Met Arg His Ser Leu Met
100 105 110

Thr His Leu Leu Thr Met Thr Asp Asn Ser Asp Ala Glu Lys Ala Val
115 120 125

Ala Ser Glu Asp Pro Arg Thr Gln Cys Asp Asn Leu Thr Gln Ile Leu
130 135 140

Val Ser Arg Leu Asn Ser Ile Ser Ser Ser Ile Ala Ser Leu Asn Glu
145 150 155 160

Met Gly Val Val Asn Gly Asn Gly Val Gly Ala Ala Ala Val Thr Gly
165 170 175

Ala Ala Ala Val Thr Gly Ala Ala Ala Val Thr Gly Ala Ala Ala Val
180 185 190

Thr Gly Ala Ala Ala Ser His Ser Tyr Asp Ala Thr Gln Ser Ser Ile
195 200 205

Gly Leu Arg Lys Gln Ser Leu Pro Asn Tyr Leu Asp Ala Thr Lys Met
210 215 220

Leu Pro Glu Ser Arg His Asp Ile Val Met Ser Ala Ile Tyr Ser Phe
225 230 235 240

Thr Gly Val Gln Gly Lys Tyr Leu Lys Lys Asp Val Val Thr Gly Arg
245 250 255

Phe Lys Leu Asp Gln Gln Asn Ile Lys Phe Leu Thr Thr Gly Gln Ala
260 265 270

Gly Met Leu Leu Arg Leu Ser Glu Leu Gly Tyr Tyr His Asp Arg Val
275 280 285

Val Lys Phe Ser Asp Val Ser Thr Gly Phe Asn Ala Ile Gly Ser Met
290 295 300

Gly Gln Ala Leu Ile Ser Lys Leu Lys Glu Glu Leu Ala Asn Phe His
305 310 315 320

Gly Gln Val Ala Met Leu His Asp Glu Met Gln Arg Phe Arg Gln Ala
325 330 335

Sequence listing as filed1.txt

Ser Val Asn Gly Ile Ala Asn Lys Gly Lys Lys Asp Ser Gly Pro Asp
340 345 350

Ala Gly Asp Glu Met Thr Leu Phe Lys Leu Leu Ala Trp Tyr Ile Lys
355 360 365

Pro Leu His Arg Met Gln Trp Leu Thr Lys Ile Ala Asp Ala Cys Gln
370 375 380

Val Lys Lys Gly Gly Asp Leu Ala Ser Thr Val Tyr Asp Phe Leu Asp
385 390 395 400

Asn Gly Asn Asp Met Val Asn Lys Leu Val Glu Asp Leu Leu Thr Ala
405 410 415

Ile Cys Gly Pro Leu Val Arg Met Ile Ser Lys Trp Ile Leu Glu Gly
420 425 430

Gly Ile Ser Asp Met His Arg Glu Phe Phe Val Lys Ser Ile Lys Asp
435 440 445

Val Gly Val Asp Arg Leu Trp His Asp Lys Phe Arg Leu Arg Leu Pro
450 455 460

Met Leu Pro Lys Phe Val Pro Met Asp Met Ala Asn Lys Ile Leu Met
465 470 475 480

Thr Gly Lys Ser Ile Asn Phe Leu Arg Glu Ile Cys Glu Glu Gln Gly
485 490 495

Met Met Lys Glu Arg Asp Glu Leu Met Lys Val Met Glu Ser Ser Ala
500 505 510

Ser Gln Ile Phe Ser Tyr Thr Pro Asp Thr Ser Trp His Ala Ala Val
515 520 525

Glu Thr Cys Tyr Gln Gln Thr Ser Lys His Val Leu Asp Ile Met Val
530 535 540

Gly Pro His Lys Leu Leu Asp His Leu His Gly Met Arg Arg Tyr Leu
545 550 555 560

Leu Leu Gly Gln Gly Asp Phe Ile Ser Ile Leu Ile Glu Asn Met Lys
565 570 575

Asn Glu Leu Glu Arg Pro Gly Leu Asp Ile Tyr Ala Asn Asp Leu Thr
580 585 590

Sequence listing as filed1.txt

Ser Met Leu Asp Ser Ala Leu Arg Cys Thr Asn Ala Gln Tyr Asp Asp
595 600 605

Pro Asp Ile Leu Asn His Leu Asp Val Ile Val Gln Arg Pro Phe Asn
610 615 620

Gly Asp Ile Gly Trp Asn Ile Ile Ser Leu Gln Tyr Ile Val His Gly
625 630 635 640

Pro Leu Ala Ala Met Leu Glu Ser Thr Met Pro Thr Tyr Lys Val Leu
645 650 655

Phe Lys Pro Leu Trp Arg Met Lys His Met Glu Phe Val Leu Ser Met
660 665 670

Lys Ile Trp Lys Glu Gln Met Gly Asn Ala Lys Ala Leu Arg Thr Met
675 680 685

Lys Ser Glu Ile Gly Lys Ala Ser His Arg Leu Asn Leu Phe Thr Ser
690 695 700

Glu Ile Met His Phe Ile His Gln Met Gln Tyr Tyr Val Leu Phe Glu
705 710 715 720

Val Ile Glu Cys Asn Trp Val Glu Leu Gln Lys Lys Met Gln Lys Ala
725 730 735

Thr Thr Leu Asp Glu Ile Leu Glu Ala His Glu Lys Phe Leu Gln Thr
740 745 750

Ile Leu Val Gly Cys Phe Val Ser Asn Lys Ala Ser Val Glu His Ser
755 760 765

Leu Glu Val Val Tyr Glu Asn Ile Ile Glu Leu Glu Lys Trp Gln Ser
770 775 780

Ser Phe Tyr Lys Asp Cys Phe Lys Glu Leu Asn Ala Arg Lys Glu Leu
785 790 795 800

Ser Lys Ile Val Glu Lys Ser Glu Lys Lys Gly Val Tyr Gly Leu Thr
805 810 815

Asn Lys Met Ile Leu Gln Arg Asp Gln Glu Ala Lys Ile Phe Ala Glu
820 825 830

Lys Met Asp Ile Ala Cys Arg Gly Leu Glu Val Ile Ala Thr Asp Tyr

Sequence listing as filed1.txt

835

840

845

Glu Lys Ala Val Ser Thr Phe Leu Met Ser Leu Asn Ser Ser Asp Asp
850 855 860

Pro Asn Leu Gln Leu Phe Gly Thr Arg Leu Asp Phe Asn Glu Tyr Tyr
865 870 875 880

Lys Lys Arg Asp Thr Asn Leu Ser Lys Pro Leu Thr Phe Glu His Met
885 890 895

Arg Met Ser Asn Val Phe Ala Val Asn Ser Arg Phe Val Ile Cys Thr
900 905 910

Pro Ser Thr Gln Glu
915

<210> 199

<211> 3795

<212> DNA

<213> Homo sapiens

<400> 199

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ctgcagaacc tgtgctgcag gatcctgggc aggagcgaag ctgatgtagc ccagcagttc	180
cagtatgctg tgcgggtgat tggcagcaac ttcgccccaa ctgttgaaag agatgaattt	240
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gacattttgt acgtctttca gggcatagat ggcaaaaaca tcaaaatgaa caaactgaa	900

Sequence listing as filed1.txt

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ctggaccgct cattcggact cgtcgggcag agcttttgtg ctgccttgca ccaggaactc	1080
agagaatact atcgattgct ctctgtttta cattctcagc tacaactaga ggatgaccag	1140
ggtgtgaatt tgggacttga gagtagttta acacttcggc gcctcctggg ttggacctat	1200
gatcccaaaa tacgactgaa gacccttgcg gccctagtg accactgcca aggaaggaaa	1260
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Sequence listing as filed1.txt

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tatatactac tgaccaagat gttggggtgg gggggattgt tttttgtaaa aatgtc	3720
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<210> 200

<211> 907

<212> PRT

<213> Homo sapiens

<400> 200

Met	Ala	Thr	Pro	Asp	Gln	Lys	Ser	Pro	Asn	Val	Leu	Leu	Gln	Asn	Leu
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Cys	Cys	Arg	Ile	Leu	Gly	Arg	Ser	Glu	Ala	Asp	Val	Ala	Gln	Gln	Phe
			20					25					30		

Gln	Tyr	Ala	Val	Arg	Val	Ile	Gly	Ser	Asn	Phe	Ala	Pro	Thr	Val	Glu
		35					40					45			

Arg	Asp	Glu	Phe	Leu	Val	Ala	Glu	Lys	Ile	Lys	Lys	Glu	Leu	Ile	Arg
	50					55					60				

Sequence listing as filed1.txt

Gln Arg Arg Glu Ala Asp Ala Ala Leu Phe Ser Glu Leu His Arg Lys
65 70 75 80

Leu His Ser Gln Gly Val Leu Lys Asn Lys Trp Ser Ile Leu Tyr Leu
85 90 95

Leu Leu Ser Leu Ser Glu Asp Pro Arg Arg Gln Pro Ser Lys Val Ser
100 105 110

Ser Tyr Ala Thr Leu Phe Ala Gln Ala Leu Pro Arg Asp Ala His Ser
115 120 125

Thr Pro Tyr Tyr Tyr Ala Arg Pro Gln Thr Leu Pro Leu Ser Tyr Gln
130 135 140

Asp Arg Ser Ala Gln Ser Ala Gln Ser Ser Gly Ser Val Gly Ser Ser
145 150 155 160

Gly Ile Ser Ser Ile Gly Leu Cys Ala Leu Ser Gly Pro Ala Pro Ala
165 170 175

Pro Gln Ser Leu Leu Pro Gly Gln Ser Asn Gln Ala Pro Gly Val Gly
180 185 190

Asp Cys Leu Arg Gln Gln Leu Gly Ser Arg Leu Ala Trp Thr Leu Thr
195 200 205

Ala Asn Gln Pro Ser Ser Gln Ala Thr Thr Ser Lys Gly Val Pro Ser
210 215 220

Ala Val Ser Arg Asn Met Thr Arg Ser Arg Arg Glu Gly Asp Thr Gly
225 230 235 240

Gly Thr Met Glu Ile Thr Glu Ala Ala Leu Val Arg Asp Ile Leu Tyr
245 250 255

Val Phe Gln Gly Ile Asp Gly Lys Asn Ile Lys Met Asn Asn Thr Glu
260 265 270

Asn Cys Tyr Lys Val Glu Gly Lys Ala Asn Leu Ser Arg Ser Leu Arg
275 280 285

Asp Thr Ala Val Arg Leu Ser Glu Leu Gly Trp Leu His Asn Lys Ile
290 295 300

Arg Arg Tyr Thr Asp Gln Arg Ser Leu Asp Arg Ser Phe Gly Leu Val
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305          310          315          320
sequence listing as filed.txt

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Sequence listing as filed1.txt

Ala Met Arg Arg Tyr Leu Leu Leu Gly Gln Gly Asp Phe Ile Arg His
565 570 575

Leu Met Asp Leu Leu Lys Pro Glu Leu Val Arg Pro Ala Thr Thr Leu
580 585 590

Tyr Gln His Asn Leu Thr Gly Ile Leu Glu Thr Ala Val Arg Ala Thr
595 600 605

Asn Ala Gln Phe Asp Ser Pro Glu Ile Leu Arg Arg Leu Asp Val Arg
610 615 620

Leu Leu Glu Val Ser Pro Gly Asp Thr Gly Trp Asp Val Phe Ser Leu
625 630 635 640

Asp Tyr His Val Asp Gly Pro Ile Ala Thr Val Phe Thr Arg Glu Cys
645 650 655

Met Ser His Tyr Leu Arg Val Phe Asn Phe Leu Trp Arg Ala Lys Arg
660 665 670

Met Glu Tyr Ile Leu Thr Asp Ile Arg Lys Gly His Met Cys Asn Ala
675 680 685

Lys Leu Leu Arg Asn Met Pro Glu Phe Ser Gly Val Leu His Gln Cys
690 695 700

His Ile Leu Ala Ser Glu Met Val His Phe Ile His Gln Met Gln Tyr
705 710 715 720

Tyr Ile Thr Phe Glu Val Leu Glu Cys Ser Trp Asp Glu Leu Trp Asn
725 730 735

Lys Val Gln Gln Ala Gln Asp Leu Asp His Ile Ile Ala Ala His Glu
740 745 750

Val Phe Leu Asp Thr Ile Ile Ser Arg Cys Leu Leu Asp Ser Asp Ser
755 760 765

Arg Ala Leu Leu Asn Gln Leu Arg Ala Val Phe Asp Gln Ile Ile Glu
770 775 780

Leu Gln Asn Ala Gln Asp Ala Ile Tyr Arg Ala Ala Leu Glu Glu Leu
785 790 795 800

Gln Arg Arg Leu Gln Phe Glu Glu Lys Lys Lys Gln Arg Glu Ile Glu
805 810 815

Sequence listing as filed1.txt

Gly Gln Trp Gly Val Thr Ala Ala Glu Glu Glu Glu Glu Asn Lys Arg
820 825 830

Ile Gly Glu Phe Lys Glu Ser Ile Pro Lys Met Cys Ser Gln Leu Arg
835 840 845

Ile Leu Thr His Phe Tyr Gln Gly Ile Val Gln Gln Phe Leu Val Leu
850 855 860

Leu Thr Thr Ser Ser Asp Glu Ser Leu Arg Phe Leu Ser Phe Arg Leu
865 870 875 880

Asp Phe Asn Glu His Tyr Lys Ala Arg Glu Pro Arg Leu Arg Val Ser
885 890 895

Leu Gly Thr Arg Gly Arg Arg Ser Ser His Thr
900 905

<210> 201

<211> 761

<212> DNA

<213> Drosophila melanogaster

<400> 201
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ctcaaggacg tgccggccca actggaggcc actttgaaac cgcgtcgcta tgaagcaagc 180
actttgttta acattgacct ggacgatatc tgggatccta gctgtcagga ggacgaggtg 240
cagcagtaca aggagcgcgc ccagaaggag cagcaaaagt tcttcgactt tgtaatgcat 300
gcggcactgg acacggacaa tcgcaagggt agcttcaagc caaacaagga gcagcagcgt 360
tacctagatc agggacccaa tttgcaaaac ttcgtgcgaa gctcgttggc tttcacaac 420
gcggccatcc gatttcaggc ggagcacgag gacatgatgg agctgcagtg caatatggac 480
gatcactacc tattcatgcg gaacaccatg atcaacaacg ctatacacca gaatatggcc 540
aaccaacggt gaccctaagc tatgcataaa tatacatatg tgaattgtag atattgataa 600
attaaattaa gactcagaga ttgtaagacg gtttgctttt ggcttataca gtataattcg 660
cttagctgcc tcgagtactt tgcacaatgc ctcgatgcag gtaacttaaa aatgcagcta 720
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Sequence listing as filed1.txt

<210> 202

<211> 183

<212> PRT

<213> Drosophila melanogaster

<400> 202

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Ser Asp Val Leu Glu Tyr Val Gly Asn Thr Ser Ala Val Asp Leu Ser
20 25 30

Ser Gly Asp Leu Ser Asp Ile Asp Leu Lys Asp Val Pro Ala Gln Leu
35 40 45

Glu Ala Thr Leu Lys Pro Arg Arg Tyr Glu Ala Ser Thr Leu Phe Asn
50 55 60

Ile Asp Leu Asp Asp Ile Trp Asp Pro Ser Cys Gln Glu Asp Glu Val
65 70 75 80

Gln Gln Tyr Lys Glu Arg Ala Gln Lys Glu Gln Gln Lys Phe Phe Asp
85 90 95

Phe Val Met His Ala Ala Leu Asp Thr Asp Asn Arg Lys Val Ser Phe
100 105 110

Lys Pro Asn Lys Glu Gln Gln Arg Tyr Leu Asp Gln Gly Pro Asn Leu
115 120 125

Gln Asn Phe Val Arg Ser Ser Leu Ala Phe Thr Asn Ala Ala Ile Arg
130 135 140

Phe Gln Ala Glu His Glu Asp Met Met Glu Leu Gln Cys Asn Met Asp
145 150 155 160

Asp His Tyr Leu Phe Met Arg Asn Thr Met Ile Asn Asn Ala Ile His
165 170 175

Gln Asn Met Ala Asn Gln Arg
180

<210> 203

<211> 723

Sequence listing as filed1.txt

<212> DNA

<213> Drosophila melanogaster

<400> 203

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ttaatctact ggattgccta tggagtttat gtggcctttg attatttcac agcgggtctg	180
ctggcattta ttccattgct aagtgagttc aagggtgcttc tcctgttctg gatgttgccc	240
tctgtgggcg gcggcagtga ggtgatctac gaggagtcc tgcgatcctt tagctgtaac	300
gaatccttcg accaggtcct gggacgtatc accttggaat ggggcgaatt ggtgtggcaa	360
caagtttgct ccgttcttag ccatttgatg gttttggcag atcgctatct cctgcccagc	420
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gccaaaaggc agttggaaga gaagcggaaa cagatgggta acttatctga taccatcaac	540
gaggtttttg gagaaaaatat cgattttaa atggatctgc tgcacggatc cgaatctgat	600
ttattgggta ttaaggagcc tatttccaag cccaaggaga gaccaatacc gccgccgaag	660
ccaatgcgtc agccatcatc aagcaaccag caagaaatga atctttcgtc gcagtttatg	720
tga	723

<210> 204

<211> 240

<212> PRT

<213> Drosophila melanogaster

<400> 204

Met	Ile	Tyr	Ala	Ile	Val	Ile	His	Ile	Leu	Ser	Leu	Leu	Val	Gly	Cys
1				5					10					15	
Phe	Tyr	Pro	Ala	Phe	Ala	Ser	Tyr	Lys	Ile	Leu	Lys	Ser	Gln	Asn	Cys
			20					25					30		
Ser	Val	Asn	Asp	Leu	Arg	Gly	Trp	Leu	Ile	Tyr	Trp	Ile	Ala	Tyr	Gly
		35					40					45			
Val	Tyr	Val	Ala	Phe	Asp	Tyr	Phe	Thr	Ala	Gly	Leu	Leu	Ala	Phe	Ile
	50					55					60				

Sequence listing as filed1.txt

Pro Leu Leu Ser Glu Phe Lys Val Leu Leu Leu Phe Trp Met Leu Pro
65 70 75 80

Ser Val Gly Gly Gly Ser Glu Val Ile Tyr Glu Glu Phe Leu Arg Ser
85 90 95

Phe Ser Cys Asn Glu Ser Phe Asp Gln Val Leu Gly Arg Ile Thr Leu
100 105 110

Glu Trp Gly Glu Leu Val Trp Gln Gln Val Cys Ser Val Leu Ser His
115 120 125

Leu Met Val Leu Ala Asp Arg Tyr Leu Leu Pro Ser Gly His Arg Pro
130 135 140

Ala Leu Gln Ile Thr Pro Ser Ile Glu Asp Leu Val Asn Asp Ala Ile
145 150 155 160

Ala Lys Arg Gln Leu Glu Glu Lys Arg Lys Gln Met Gly Asn Leu Ser
165 170 175

Asp Thr Ile Asn Glu Val Leu Gly Glu Asn Ile Asp Leu Asn Met Asp
180 185 190

Leu Leu His Gly Ser Glu Ser Asp Leu Leu Val Ile Lys Glu Pro Ile
195 200 205

Ser Lys Pro Lys Glu Arg Pro Ile Pro Pro Pro Lys Pro Met Arg Gln
210 215 220

Pro Ser Ser Ser Asn Gln Gln Glu Met Asn Leu Ser Ser Gln Phe Met
225 230 235 240

<210> 205

<211> 3856

<212> DNA

<213> Homo sapiens

<400> 205

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gttccgggaa cgccgcagca gcccgcgccg cccgcagcct agccgagccg cgccgcccgg 120

gcctcgcccc cccgcctgcc cgccatggtg tcatggatca tctccaggct ggtggtgctt 180

atatttgga ccctttaccc tgcgtattat tcctacaagg ctgtgaaatc aaaggacatt 240

Sequence listing as filed1.txt

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gtagcctggc tgctgtctcc ctacacaaaa ggctccagcc tcctgtacag gaagtttgta	420
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cgaagttagc atgcccttgt gcacttcggg aagcgggggct tgaacgtggc cgccacagcg	540
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atgcaggacc tcaccacat caggggagac ggcggcccctg ctccctcggg cccccacca	660
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gagagcgcta gcagctcagg caccgcctag aatccttcga tctcgttca ggaagaaaag	780
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ggtgtgcttt gagtgtgcag cctcacaac atggcctttt ctctctccc ttccactttt	960
aaggatttat ttttttccc cttttcttta ttttgctggg gagaggctaa agggaaaggt	1020
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acagcatttt ttacaacttt ctttgttctt ggtacttata ctttgaacta tgatgtacat	1260
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gtggctcaca ctttctgttc ccctcctggc ctgtgcagaa tgtaaacagc agactcatac	2040
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Sequence listing as filed1.txt

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ctagagaatt agtgttatat accatataga acttactgtc agtcaactat aaacaggccc	2400
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catattggaa tcccatctac ccatagttcc tctgaagggtg attttgtaat ttgcaaaagg	2580
gtataggaaa atatacctaa aagcgaatth gtggctgaga ggataaacag aagctgtttg	2640
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<210> 206

<211> 240

Sequence listing as filed1.txt

<212> PRT

<213> Homo sapiens

<400> 206

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20 25 30

Ser Val Asn Asp Leu Arg Gly Trp Leu Ile Tyr Trp Ile Ala Tyr Gly
35 40 45

Val Tyr Val Ala Phe Asp Tyr Phe Thr Ala Gly Leu Leu Ala Phe Ile
50 55 60

Pro Leu Leu Ser Glu Phe Lys Val Leu Leu Leu Phe Trp Met Leu Pro
65 70 75 80

Ser Val Gly Gly Gly Ser Glu Val Ile Tyr Glu Glu Phe Leu Arg Ser
85 90 95

Phe Ser Cys Asn Glu Ser Phe Asp Gln Val Leu Gly Arg Ile Thr Leu
100 105 110

Glu Trp Gly Glu Leu Val Trp Gln Gln Val Cys Ser Val Leu Ser His
115 120 125

Leu Met Val Leu Ala Asp Arg Tyr Leu Leu Pro Ser Gly His Arg Pro
130 135 140

Ala Leu Gln Ile Thr Pro Ser Ile Glu Asp Leu Val Asn Asp Ala Ile
145 150 155 160

Ala Lys Arg Gln Leu Glu Glu Lys Arg Lys Gln Met Gly Asn Leu Ser
165 170 175

Asp Thr Ile Asn Glu Val Leu Gly Glu Asn Ile Asp Leu Asn Met Asp
180 185 190

Leu Leu His Gly Ser Glu Ser Asp Leu Leu Val Ile Lys Glu Pro Ile
195 200 205

Ser Lys Pro Lys Glu Arg Pro Ile Pro Pro Pro Lys Pro Met Arg Gln
210 215 220

Sequence listing as filed1.txt

Pro Ser Ser Ser Asn Gln Gln Glu Met Asn Leu Ser Ser Gln Phe Met
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<210> 207

<211> 2838

<212> DNA

<213> *Drosophila melanogaster*

<400> 207

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ctaaacaaca	acaatgccta	caacaatcag	cgaaaactttg	agtacgaaag	agccatacag	180
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gccagcaagg	gtcggaaagc	aaaggtcacc	ccaccaacgg	agacacccga	ggcccaggag	300
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acaccagcc	cgcaggcttc	ctacccggcc	acgccacct	cctggacagc	cacaccgccc	540
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accatgcgcg	tccagctcca	tggttacaca	tggtttcatg	gcaatctttc	cggaaaggaa	660
gcggaaaaat	tgatcctgga	gcgggggaag	aatggttcgt	ttctcgtccg	tgaatctcag	720
agcaagcctg	gcgacttcgt	cctttccgtg	cgcacggacg	acaaagtaac	gcatgtcatg	780
attcgatggc	aggacaagaa	gtacgacgtc	ggcggcgggg	aatcctttgg	caccttgctg	840
gaactgatcg	atcactacaa	gcgtaatccc	atggtggaga	cgtagcgaac	cgtggtgcat	900
ctgcgacagc	cattcaacgc	cacacgaatc	acggcggccc	gcatcaatgc	ccgggtggaa	960
cagctgggtca	agggagggttt	ctgggaggaa	ttcgaatcgc	tgcaacagga	cagtcgggac	1020
acattctcgc	gcaacgaggg	ctacaaacag	gagaaccgcc	tcaagaatcg	ctaccgcaac	1080
atattgccat	acgaccacac	gcgcgtcaag	ctgctggacg	tggagcatag	cgtggccgga	1140
gccgagtaca	tcaatgccaa	ctacatacgg	ctgcccaccg	acggcgacct	gtacaacatg	1200
agcagctcgt	cggagagcct	gaacagctcg	gtgccctcgt	gccccgcctg	cacggctgcc	1260
cagacacagc	ggaactgctc	caactgccag	ctgcaaaaca	agacgtgcgt	gcagtgcgcc	1320
gtgaagagcg	ccattctgcc	gtatagcaac	tgtgccacct	gcagccgcaa	gtcagactcc	1380

Sequence listing as filed1.txt

ctgagcaagc acaagcggag cgaatcctcg gcctcttcat cgccctcctc cggctctggg	1440
tccggaccag gatcgtcggg caccagcgga gtgagcagcg tcaatggacc cggcacacccc	1500
accaatctca cgagcggcac agccggatgt ctggtcggcc tgctgaagag aactcgaac	1560
gactcgccg gagctgtttc tatatcgatg gccgaacggg aacgcgagag ggagcgcgag	1620
atgtttaaga cctacatcgc caccagggc tgtctgctca cccagcaagt gaacacggtg	1680
acggacttct ggaacatggt ctggcaggag aacacgcggg tgatcgtcac gaccaccaag	1740
gagtacgagc gcggcaaaga aaagtgcgcc cgctactggc cggacgaggg tagatcggag	1800
cagttcggcc acgcgcggat acagtgcgtc tcggagaact cgaccagtga ctatacgctg	1860
cgcgagttcc tcgtctcgtg gcgggatcag ccggcgcgcc ggatctttca ctaccatttc	1920
caggtgtggc cggatcacgg agtgcccgcc gatccgggct gtgtgctcaa cttcctgcaa	1980
gatgtcaaca cgcgtcagag tcacctggct caagcgggcg agaagccggg tccgatctgc	2040
gtgactgct ctgcgggcat cggtcgcact ggcaccttta ttgtgatcga tatgattctc	2100
gatcagattg tgcgcaatgg attggatact gaaatcgaca tccagcgcac cattcagatg	2160
gtccgatcgc agcgttccgg tcttgtgcaa accgaggcgc aatacaagtt cgtctactat	2220
gcggtgcagc actatataca gaccctgac gcccggaac gagctgagga gcagagcctg	2280
caggttgccc gcgagtacac caatataaag tacacgggcg aaattggaaa cgattcacia	2340
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acgccgacat cggcggatgt gggcactggg atgggcctaa gcatgggctg gggcatgggc	2460
gtcggcaaca agcacgcac gaagcagcag ccgccgttgc cggtggtcaa ctgcaacaat	2520
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agcagcaacg gcagcagcaa cggtaacatc aacgccctac tgggcggcat cggcttgggg	2640
ctgggcggca atatgcgcaa gtcgaacttt tacagcgact cgctgaagca gcaacagcag	2700
cgcgaggagc aggctccggc gggagcaggt aagatgcagc agccggcgcc gccgctgcga	2760
ccgcgtcctg gaataactcaa gttgctcacc agtcccgctc tctttcagca aaattcaaaa	2820
acattcccaa agacatga	2838

<210> 208

<211> 945

<212> PRT

<213> *Drosophila melanogaster*

<400> 208

Sequence listing as filed1.txt

Met Leu Phe Asn Lys Cys Leu Glu Lys Leu Ser Ser Ser Leu Gly Asn
1 5 10 15

Val Val Asn His Lys Leu Gln Glu Lys Gln Val Tyr Asn Asn Asn Asn
20 25 30

Ile Asn Asn Asn Asn Asn Asn Thr Leu Asn Asn Asn Asn Ala Tyr Asn
35 40 45

Asn Gln Arg Asn Phe Glu Tyr Glu Arg Ala Ile Gln Ala His Tyr Gly
50 55 60

Ser Lys Gly Arg Arg Ser Glu Glu Arg Glu Arg Ser Gly Lys Phe Lys
65 70 75 80

Ala Ser Lys Gly Arg Lys Ala Lys Val Thr Pro Pro Thr Glu Thr Pro
85 90 95

Glu Ala Gln Glu Pro Ala Cys Lys Asn Cys Met Thr His Asp Glu Leu
100 105 110

Ala Gln Ile Ile Lys Gly Val Ala Lys Gly Ala Asp Ala Gln Arg Asn
115 120 125

Arg Asp Asn Arg Leu Gln Arg Arg Arg Arg Pro Leu Ser Ala Gln Pro
130 135 140

Ser Ala Ala Ala Ser Ala Ser Thr Ser Thr Glu Ser Leu His Arg Leu
145 150 155 160

Thr Pro Ser Pro Gln Ala Ser Tyr Pro Ala Thr Pro Thr Ser Trp Thr
165 170 175

Ala Thr Pro Pro Gln Phe Pro Ala Ala Phe Gly Gly Ala Ser Cys Ser
180 185 190

Asn Ser Thr Leu Ser Leu Leu Ala Thr Met Arg Val Gln Leu His Gly
195 200 205

Tyr Thr Trp Phe His Gly Asn Leu Ser Gly Lys Glu Ala Glu Lys Leu
210 215 220

Ile Leu Glu Arg Gly Lys Asn Gly Ser Phe Leu Val Arg Glu Ser Gln
225 230 235 240

Ser Lys Pro Gly Asp Phe Val Leu Ser Val Arg Thr Asp Asp Lys Val
245 250 255

Sequence listing as filed1.txt

Thr His Val Met Ile Arg Trp Gln Asp Lys Lys Tyr Asp Val Gly Gly
260 265 270

Gly Glu Ser Phe Gly Thr Leu Ser Glu Leu Ile Asp His Tyr Lys Arg
275 280 285

Asn Pro Met Val Glu Thr Cys Gly Thr Val Val His Leu Arg Gln Pro
290 295 300

Phe Asn Ala Thr Arg Ile Thr Ala Ala Gly Ile Asn Ala Arg Val Glu
305 310 315 320

Gln Leu Val Lys Gly Gly Phe Trp Glu Glu Phe Glu Ser Leu Gln Gln
325 330 335

Asp Ser Arg Asp Thr Phe Ser Arg Asn Glu Gly Tyr Lys Gln Glu Asn
340 345 350

Arg Leu Lys Asn Arg Tyr Arg Asn Ile Leu Pro Tyr Asp His Thr Arg
355 360 365

Val Lys Leu Leu Asp Val Glu His Ser Val Ala Gly Ala Glu Tyr Ile
370 375 380

Asn Ala Asn Tyr Ile Arg Leu Pro Thr Asp Gly Asp Leu Tyr Asn Met
385 390 395 400

Ser Ser Ser Ser Glu Ser Leu Asn Ser Ser Val Pro Ser Cys Pro Ala
405 410 415

Cys Thr Ala Ala Gln Thr Gln Arg Asn Cys Ser Asn Cys Gln Leu Gln
420 425 430

Asn Lys Thr Cys Val Gln Cys Ala Val Lys Ser Ala Ile Leu Pro Tyr
435 440 445

Ser Asn Cys Ala Thr Cys Ser Arg Lys Ser Asp Ser Leu Ser Lys His
450 455 460

Lys Arg Ser Glu Ser Ser Ala Ser Ser Ser Pro Ser Ser Gly Ser Gly
465 470 475 480

Ser Gly Pro Gly Ser Ser Gly Thr Ser Gly Val Ser Ser Val Asn Gly
485 490 495

Pro Gly Thr Pro Thr Asn Leu Thr Ser Gly Thr Ala Gly Cys Leu Val
500 505 510

Sequence listing as filed1.txt

Gly Leu Leu Lys Arg His Ser Asn Asp Ser Ser Gly Ala Val Ser Ile
515 520 525

Ser Met Ala Glu Arg Glu Arg Glu Arg Glu Arg Glu Met Phe Lys Thr
530 535 540

Tyr Ile Ala Thr Gln Gly Cys Leu Leu Thr Gln Gln Val Asn Thr Val
545 550 555 560

Thr Asp Phe Trp Asn Met Val Trp Gln Glu Asn Thr Arg Val Ile Val
565 570 575

Met Thr Thr Lys Glu Tyr Glu Arg Gly Lys Glu Lys Cys Ala Arg Tyr
580 585 590

Trp Pro Asp Glu Gly Arg Ser Glu Gln Phe Gly His Ala Arg Ile Gln
595 600 605

Cys Val Ser Glu Asn Ser Thr Ser Asp Tyr Thr Leu Arg Glu Phe Leu
610 615 620

Val Ser Trp Arg Asp Gln Pro Ala Arg Arg Ile Phe His Tyr His Phe
625 630 635 640

Gln Val Trp Pro Asp His Gly Val Pro Ala Asp Pro Gly Cys Val Leu
645 650 655

Asn Phe Leu Gln Asp Val Asn Thr Arg Gln Ser His Leu Ala Gln Ala
660 665 670

Gly Glu Lys Pro Gly Pro Ile Cys Val His Cys Ser Ala Gly Ile Gly
675 680 685

Arg Thr Gly Thr Phe Ile Val Ile Asp Met Ile Leu Asp Gln Ile Val
690 695 700

Arg Asn Gly Leu Asp Thr Glu Ile Asp Ile Gln Arg Thr Ile Gln Met
705 710 715 720

Val Arg Ser Gln Arg Ser Gly Leu Val Gln Thr Glu Ala Gln Tyr Lys
725 730 735

Phe Val Tyr Tyr Ala Val Gln His Tyr Ile Gln Thr Leu Ile Ala Arg
740 745 750

Lys Arg Ala Glu Glu Gln Ser Leu Gln Val Gly Arg Glu Tyr Thr Asn

Sequence listing as filed1.txt

755

760

765

Ile Lys Tyr Thr Gly Glu Ile Gly Asn Asp Ser Gln Arg Ser Pro Leu
770 775 780

Pro Pro Ala Ile Ser Ser Ile Ser Leu Val Pro Ser Lys Thr Pro Leu
785 790 795 800

Thr Pro Thr Ser Ala Asp Leu Gly Thr Gly Met Gly Leu Ser Met Gly
805 810 815

Val Gly Met Gly Val Gly Asn Lys His Ala Ser Lys Gln Gln Pro Pro
820 825 830

Leu Pro Val Val Asn Cys Asn Asn Asn Asn Asn Gly Ile Gly Asn Ser
835 840 845

Gly Cys Ser Asn Gly Gly Gly Ser Ser Thr Thr Ser Ser Ser Asn Gly
850 855 860

Ser Ser Asn Gly Asn Ile Asn Ala Leu Leu Gly Gly Ile Gly Leu Gly
865 870 875 880

Leu Gly Gly Asn Met Arg Lys Ser Asn Phe Tyr Ser Asp Ser Leu Lys
885 890 895

Gln Gln Gln Gln Arg Glu Glu Gln Ala Pro Ala Gly Ala Gly Lys Met
900 905 910

Gln Gln Pro Ala Pro Pro Leu Arg Pro Arg Pro Gly Ile Leu Lys Leu
915 920 925

Leu Thr Ser Pro Val Ile Phe Gln Gln Asn Ser Lys Thr Phe Pro Lys
930 935 940

Thr
945

<210> 209

<211> 2677

<212> DNA

<213> Drosophila melanogaster

<400> 209

agtaaaaaaa tagttttttt tttgtatcca accaaccaac tgtaaaaata agtttaaaca

60

Sequence listing as filed1.txt

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gtgtgcattc aataagaaaa tgtcatcgcg aagatggttc cacccaacga tatctggcat	180
cgaagctgag aaactgctgc aggagcaggg attcgacggc tccttcctcg cccgcctctc	240
ctcctcgaat ccgggcgcct tcacgctctc cgtgcgccgc ggcaacgagg tgaccacat	300
caaaatccaa aacaatggcg acttctttga tctctacggg ggtgaaaagt tcgccacact	360
gccggaactg gtacaatact acatggagaa tggcgagcta aaggagaaga acggccaggc	420
catcgaactc aagcagccgc tgatctgcgc cgagcccacc acggaaagat ggtttcatgg	480
caatctttcc ggaaaggaag cggaaaaatt gatcctggag cggggcaaga atggttcgtt	540
tctcgtccgt gaatctcaga gcaagcctgg cgacttcgtc ctttccgtgc gcacggacga	600
caaagtaacg catgtcatga ttcgatggca ggacaagaag tacgacgtcg gcggcgggga	660
atcctttggc accttgctcg aactgatcga tcactacaag cgtaatccca tgggtggagac	720
gtgcggaacc gtggtgcatc tgcgacagcc attcaacgcc acacgaatca cggcggccgg	780
catcaatgcc cgggtggaac agctggtcaa gggaggtttc tgggaggaat tcgaatcgct	840
gcaacaggac agtcgggaca cattctcgcg caacgagggc taaaaacagg agaaccgcct	900
caagaatcgc taccgcaaca tattgccata cgaccacacg cgcgtcaagc tgctggacgt	960
ggagcatagc gtggccggag ccgagtacat caatgccaac tacatacggc tgcccaccga	1020
cggcgacctg tacaacatga gcagctcgtc ggagagcctg aacagctcgg tgccctcgtg	1080
ccccgcctgc acggjctgccc agacacagcg gaactgctcc aactgccagc tgcaaaacaa	1140
gacgtgcgtg cagtgcgccg tgaagagcgc cattctgccg tatagcaact gtgccacctg	1200
cagccgcaag tcagactccc tgagcaagca caagcggagc gaatcctcgg cctcttcac	1260
gccctcctcc ggctctgggt ccggaccagg atcgtcgggc accagcggag tgagcagcgt	1320
caatggaccc ggcacacca ccaatctcac gagcggcaca gccggatgtc tggtcggcct	1380
gctgaagaga cactcgaacg actcgtccgg agctgtttct atatcgatgg ccgaacggga	1440
acgcgagagg gagcgcgaga tgtttaagac ctacatcgcc acccagggct gtctgctcac	1500
ccagcaagtg aacacggtga cggacttctg gaacatggtc tggcaggaga acacgcgggt	1560
gatcgtcatg accaccaagg agtacgagcg cggcaaagaa aagtgcgccc gctactggcc	1620
ggacgagggg agatcggagc agttcggcca cgcgcggata cagtgcgtct cggagaactc	1680
gaccagtgc tatacgctgc gcgagttcct cgtctcgtgg cgggatcagc cggcgcgccg	1740
gatctttcac taccatttcc aggtgtggcc ggatcacgga gtgcccgccg atccgggctg	1800
tgtgctcaac ttcctgcaag atgtcaacac gcgtcagagt cacctggctc aagcgggcga	1860
gaagccgggt ccgatctgcg tgcactgctc tgcgggcacg ggtcgcactg gcacctttat	1920

Sequence listing as filed1.txt

tgtgatcgat atgattctcg atcagattgt gcgcaatgga ttggatactg aaatcgacat	1980
ccagcgcacc attcagatgg tccgatcgca gcgttccggt cttgtgcaaa ccgagggcgca	2040
atacaagttc gtctactatg cgggtgcagca ctatatacag accctgatcg cccggaaacg	2100
agctgaggag cagagcctgc aggttggccg cgagtacacc aatataaagt acacgggcgca	2160
aattggaaaac gattcacaaa gatctccatt accaccagca atttctagca taagtttagt	2220
tccgagtaag acgccactga cgccgacatc ggcggatttg ggcaactgga tgggcctaag	2280
catgggctgt ggcatgggctg tcggcaacaa gcacgcatcg aagcagcagc cgccgttgcc	2340
ggtggtcaac tgcaacaata ataacaacgg cattggcaat agcggctgca gcaacggcgg	2400
cgggagcagc accaccagca gcagcaacgg cagcagcaac ggtaacatca acgccctact	2460
gggcggcatc ggcttggggc tgggcggcaa tatgcgcaag tcgaactttt acagcgactc	2520
gctgaagcag caacagcagc gcgaggagca ggctccggcg ggagcaggta agatgcagca	2580
gccggcgccg ccgctgcgac cgcgtcctgg aataactcaag ttgctcacca gtcccgtcat	2640
ctttcagcaa aattcaaaaa cattcccaaa gacatga	2677

<210> 210

<211> 845

<212> PRT

<213> Drosophila melanogaster

<400> 210

Met	Ser	Ser	Arg	Arg	Trp	Phe	His	Pro	Thr	Ile	Ser	Gly	Ile	Glu	Ala
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Glu	Lys	Leu	Leu	Gln	Glu	Gln	Gly	Phe	Asp	Gly	Ser	Phe	Leu	Ala	Arg
		20						25					30		
Leu	Ser	Ser	Ser	Asn	Pro	Gly	Ala	Phe	Thr	Leu	Ser	Val	Arg	Arg	Gly
		35					40					45			
Asn	Glu	Val	Thr	His	Ile	Lys	Ile	Gln	Asn	Asn	Gly	Asp	Phe	Phe	Asp
		50				55					60				
Leu	Tyr	Gly	Gly	Glu	Lys	Phe	Ala	Thr	Leu	Pro	Glu	Leu	Val	Gln	Tyr
65					70					75				80	
Tyr	Met	Glu	Asn	Gly	Glu	Leu	Lys	Glu	Lys	Asn	Gly	Gln	Ala	Ile	Glu
				85					90					95	

Sequence listing as filed1.txt

Leu Lys Gln Pro Leu Ile Cys Ala Glu Pro Thr Thr Glu Arg Trp Phe
100 105 110

His Gly Asn Leu Ser Gly Lys Glu Ala Glu Lys Leu Ile Leu Glu Arg
115 120 125

Gly Lys Asn Gly Ser Phe Leu Val Arg Glu Ser Gln Ser Lys Pro Gly
130 135 140

Asp Phe Val Leu Ser Val Arg Thr Asp Asp Lys Val Thr His Val Met
145 150 155 160

Ile Arg Trp Gln Asp Lys Lys Tyr Asp Val Gly Gly Gly Glu Ser Phe
165 170 175

Gly Thr Leu Ser Glu Leu Ile Asp His Tyr Lys Arg Asn Pro Met Val
180 185 190

Glu Thr Cys Gly Thr Val Val His Leu Arg Gln Pro Phe Asn Ala Thr
195 200 205

Arg Ile Thr Ala Ala Gly Ile Asn Ala Arg Val Glu Gln Leu Val Lys
210 215 220

Gly Gly Phe Trp Glu Glu Phe Glu Ser Leu Gln Gln Asp Ser Arg Asp
225 230 235 240

Thr Phe Ser Arg Asn Glu Gly Tyr Lys Gln Glu Asn Arg Leu Lys Asn
245 250 255

Arg Tyr Arg Asn Ile Leu Pro Tyr Asp His Thr Arg Val Lys Leu Leu
260 265 270

Asp Val Glu His Ser Val Ala Gly Ala Glu Tyr Ile Asn Ala Asn Tyr
275 280 285

Ile Arg Leu Pro Thr Asp Gly Asp Leu Tyr Asn Met Ser Ser Ser Ser
290 295 300

Glu Ser Leu Asn Ser Ser Val Pro Ser Cys Pro Ala Cys Thr Ala Ala
305 310 315 320

Gln Thr Gln Arg Asn Cys Ser Asn Cys Gln Leu Gln Asn Lys Thr Cys
325 330 335

Val Gln Cys Ala Val Lys Ser Ala Ile Leu Pro Tyr Ser Asn Cys Ala
340 345 350

Sequence listing as filed1.txt

Thr Cys Ser Arg Lys Ser Asp Ser Leu Ser Lys His Lys Arg Ser Glu
355 360 365

Ser Ser Ala Ser Ser Ser Pro Ser Ser Gly Ser Gly Ser Gly Pro Gly
370 375 380

Ser Ser Gly Thr Ser Gly Val Ser Ser Val Asn Gly Pro Gly Thr Pro
385 390 395 400

Thr Asn Leu Thr Ser Gly Thr Ala Gly Cys Leu Val Gly Leu Leu Lys
405 410 415

Arg His Ser Asn Asp Ser Ser Gly Ala Val Ser Ile Ser Met Ala Glu
420 425 430

Arg Glu Arg Glu Arg Glu Arg Glu Met Phe Lys Thr Tyr Ile Ala Thr
435 440 445

Gln Gly Cys Leu Leu Thr Gln Gln Val Asn Thr Val Thr Asp Phe Trp
450 455 460

Asn Met Val Trp Gln Glu Asn Thr Arg Val Ile Val Met Thr Thr Lys
465 470 475 480

Glu Tyr Glu Arg Gly Lys Glu Lys Cys Ala Arg Tyr Trp Pro Asp Glu
485 490 495

Gly Arg Ser Glu Gln Phe Gly His Ala Arg Ile Gln Cys Val Ser Glu
500 505 510

Asn Ser Thr Ser Asp Tyr Thr Leu Arg Glu Phe Leu Val Ser Trp Arg
515 520 525

Asp Gln Pro Ala Arg Arg Ile Phe His Tyr His Phe Gln Val Trp Pro
530 535 540

Asp His Gly Val Pro Ala Asp Pro Gly Cys Val Leu Asn Phe Leu Gln
545 550 555 560

Asp Val Asn Thr Arg Gln Ser His Leu Ala Gln Ala Gly Glu Lys Pro
565 570 575

Gly Pro Ile Cys Val His Cys Ser Ala Gly Ile Gly Arg Thr Gly Thr
580 585 590

Phe Ile Val Ile Asp Met Ile Leu Asp Gln Ile Val Arg Asn Gly Leu
595 600 605

Sequence listing as filed1.txt

Asp Thr Glu Ile Asp Ile Gln Arg Thr Ile Gln Met Val Arg Ser Gln
610 615 620

Arg Ser Gly Leu Val Gln Thr Glu Ala Gln Tyr Lys Phe Val Tyr Tyr
625 630 635 640

Ala Val Gln His Tyr Ile Gln Thr Leu Ile Ala Arg Lys Arg Ala Glu
645 650 655

Glu Gln Ser Leu Gln Val Gly Arg Glu Tyr Thr Asn Ile Lys Tyr Thr
660 665 670

Gly Glu Ile Gly Asn Asp Ser Gln Arg Ser Pro Leu Pro Pro Ala Ile
675 680 685

Ser Ser Ile Ser Leu Val Pro Ser Lys Thr Pro Leu Thr Pro Thr Ser
690 695 700

Ala Asp Leu Gly Thr Gly Met Gly Leu Ser Met Gly Val Gly Met Gly
705 710 715 720

Val Gly Asn Lys His Ala Ser Lys Gln Gln Pro Pro Leu Pro Val Val
725 730 735

Asn Cys Asn Asn Asn Asn Asn Gly Ile Gly Asn Ser Gly Cys Ser Asn
740 745 750

Gly Gly Gly Ser Ser Thr Thr Ser Ser Ser Asn Gly Ser Ser Asn Gly
755 760 765

Asn Ile Asn Ala Leu Leu Gly Gly Ile Gly Leu Gly Leu Gly Gly Asn
770 775 780

Met Arg Lys Ser Asn Phe Tyr Ser Asp Ser Leu Lys Gln Gln Gln Gln
785 790 795 800

Arg Glu Glu Gln Ala Pro Ala Gly Ala Gly Lys Met Gln Gln Pro Ala
805 810 815

Pro Pro Leu Arg Pro Arg Pro Gly Ile Leu Lys Leu Leu Thr Ser Pro
820 825 830

Val Ile Phe Gln Gln Asn Ser Lys Thr Phe Pro Lys Thr
835 840 845

<210> 211

Sequence listing as filed1.txt

<211> 1936

<212> DNA

<213> *Drosophila melanogaster*

<400> 211

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gggccggctc gactgtggtc cacacgacgg tgacagcgct gacggtggag acgatcacca	180
atgtcctgac cacggtgact tcgttccatt cgaacagcgt caacatttcg aacaacaaca	240
gcagcagtgg agcggccccc ggggcggatg cagctggcgg cgatgcaggg ggcgtggcag	300
cggctcaggg ggacgccaac aagcctatct atcctcggct ctttaaccgc atcgtgctga	360
cgctggagaa cagcctcatt ccggagggca aaatcgatgt gacgccatcc agccaggatg	420
gactggacca tgagacggag aaggacctgc gcatactggg ctgagagctt attcagacag	480
ccggaatttt gctgcgcttg ccgcaggttg ccatggccac cggccagggtg ctgttccagc	540
gcttcttcta ctcgaagagc tttgtgcggc acaacatgga gactgtggcc atgagctgcg	600
tgtgcctggc gtccaagatc gaggaggcgc cgcgccgat tagagacgtg atcaatgtgt	660
tccatcacat caagcaagtg cgggccc aaa aggaaatctc gcccatggtg ctagatcctt	720
actacacgaa cctcaagatg caggtgatca aggccgagcg gcgcgtcctc aaggaactgg	780
gcttctgtgt acacgtgaag catccgcaca agctgatcgt gatgtatctg caggtgcttc	840
agtacgagaa gcacgagaag ctgatgcagc tctcctggaa cttcatgaat gactcgctga	900
ggacggacgt ttttatgcmc tacacaccag aggcgattgc atgcgcctgc atctacctga	960
gtgcccga gctcaacata cctctgccc acagcccgc gtggttcggc atttttcggg	1020
tgcccatggc ggacattacg gatattctgt accgtgtgat ggagctgtac atgcgttcca	1080
agccggtggt ggagaaactg gaggcggccg tggacgagct gaaaaagcgg tacattgatg	1140
cgcgcaacaa aacgaaggag gcaaacacac cgccggctgt aatcaccgtg gatcggaaca	1200
atggctcgca caatgcgtgg ggtggcttca tccagcgtgc tatcccactg cccttgccat	1260
cggaaaagtc gccgcaaaag gattcgaggt cacgctcgcg atccaggacg cgcacccatt	1320
cgcggacacc tcgctcccga tccccaggt ccaggtcgcc tagtcgag cgcactaaga	1380
agaccaccg cagtcgatcc tcccgtcgc gctcccgttc gccgccgaag cataagaaaa	1440
agtcacgtca ctactcgagg tcgcccacgc gctccaattc gccgcacagc aagcacagga	1500
agtcgaaatc ctcgcgagaa cgctctgaat actactcaa gaaagatcgg tctggaaacc	1560
caggcagtag caataatcta ggtgatggcg acaagtatcg caactccgtc tccaattccg	1620

Sequence listing as filed1.txt

gcaagcacag tcggtactcc tcctcctcgt cgcgtcggaa cagcgggtggt ggtggagacg 1680
 gaagaagcgg aggaggaggt ggtggcgggcg gtggaggcaa cgggaaccac ggcagccgag 1740
 gggggcacaa gcatcgggat ggcgatcgct ccagggatcg caagcgctag tgattgatag 1800
 acaagcgaga caaacactcc cttatatatta attgctcttt attttacaaa ttacagatt 1860
 atttctaccg atttagtaat gctaattgtgt attgaaaaaa cgaacgcggg taaacaataa 1920
 atgtaactct tcaatc 1936

<210> 212

<211> 560

<212> PRT

<213> Drosophila melanogaster

<400> 212

Met Ala Thr Arg Gly Ala Gly Ser Thr Val Val His Thr Thr Val Thr
 1 5 10 15

Ala Leu Thr Val Glu Thr Ile Thr Asn Val Leu Thr Thr Val Thr Ser
 20 25 30

Phe His Ser Asn Ser Val Asn Ile Ser Asn Asn Asn Ser Ser Ser Gly
 35 40 45

Ala Ala Pro Gly Ala Asp Ala Ala Gly Gly Asp Ala Gly Gly Val Ala
 50 55 60

Ala Ala Gln Ala Asp Ala Asn Lys Pro Ile Tyr Pro Arg Leu Phe Asn
 65 70 75 80

Arg Ile Val Leu Thr Leu Glu Asn Ser Leu Ile Pro Glu Gly Lys Ile
 85 90 95

Asp Val Thr Pro Ser Ser Gln Asp Gly Leu Asp His Glu Thr Glu Lys
 100 105 110

Asp Leu Arg Ile Leu Gly Cys Glu Leu Ile Gln Thr Ala Gly Ile Leu
 115 120 125

Leu Arg Leu Pro Gln Val Ala Met Ala Thr Gly Gln Val Leu Phe Gln
 130 135 140

Arg Phe Phe Tyr Ser Lys Ser Phe Val Arg His Asn Met Glu Thr Val
 Page 272

Sequence listing as filed1.txt
155

145											150											155											160
Ala	Met	Ser	Cys	Val 165	Cys	Leu	Ala	Ser	Lys 170	Ile	Glu	Glu	Ala	Pro 175	Arg																		
Arg	Ile	Arg	Asp 180	Val	Ile	Asn	Val	Phe 185	His	His	Ile	Lys	Gln 190	Val	Arg																		
Ala	Gln	Lys 195	Glu	Ile	Ser	Pro	Met 200	Val	Leu	Asp	Pro	Tyr 205	Tyr	Thr	Asn																		
Leu	Lys 210	Met	Gln	Val	Ile	Lys 215	Ala	Glu	Arg	Arg	Val 220	Leu	Lys	Glu	Leu																		
Gly 225	Phe	Cys	Val	His	Val 230	Lys	His	Pro	His	Lys 235	Leu	Ile	Val	Met	Tyr 240																		
Leu	Gln	Val	Leu	Gln 245	Tyr	Glu	Lys	His	Glu 250	Lys	Leu	Met	Gln	Leu 255	Ser																		
Trp	Asn	Phe	Met 260	Asn	Asp	Ser	Leu	Arg 265	Thr	Asp	Val	Phe	Met 270	Arg	Tyr																		
Thr	Pro	Glu 275	Ala	Ile	Ala	Cys	Ala 280	Cys	Ile	Tyr	Leu	Ser 285	Ala	Arg	Lys																		
Leu	Asn 290	Ile	Pro	Leu	Pro	Asn 295	Ser	Pro	Pro	Trp	Phe 300	Gly	Ile	Phe	Arg																		
Val 305	Pro	Met	Ala	Asp	Ile 310	Thr	Asp	Ile	Cys	Tyr 315	Arg	Val	Met	Glu	Leu 320																		
Tyr	Met	Arg	Ser	Lys 325	Pro	Val	Val	Glu	Lys 330	Leu	Glu	Ala	Ala	Val 335	Asp																		
Glu	Leu	Lys	Lys 340	Arg	Tyr	Ile	Asp	Ala 345	Arg	Asn	Lys	Thr	Lys 350	Glu	Ala																		
Asn	Thr	Pro 355	Pro	Ala	Val	Ile	Thr 360	Val	Asp	Arg	Asn	Asn 365	Gly	Ser	His																		
Asn	Ala 370	Trp	Gly	Gly	Phe	Ile 375	Gln	Arg	Ala	Ile	Pro 380	Leu	Pro	Leu	Pro																		
Ser 385	Glu	Lys	Ser	Pro	Gln 390	Lys	Asp	Ser	Arg	Ser 395	Arg	Ser	Arg	Ser	Arg 400																		

Sequence listing as filed1.txt

Thr Arg Thr His Ser Arg Thr Pro Arg Ser Arg Ser Pro Arg Ser Arg
405 410 415

Ser Pro Ser Arg Glu Arg Thr Lys Lys Thr His Arg Ser Arg Ser Ser
420 425 430

Arg Ser Arg Ser Arg Ser Pro Pro Lys His Lys Lys Lys Ser Arg His
435 440 445

Tyr Ser Arg Ser Pro Thr Arg Ser Asn Ser Pro His Ser Lys His Arg
450 455 460

Lys Ser Lys Ser Ser Arg Glu Arg Ser Glu Tyr Tyr Ser Lys Lys Asp
465 470 475 480

Arg Ser Gly Asn Pro Gly Ser Ser Asn Asn Leu Gly Asp Gly Asp Lys
485 490 495

Tyr Arg Asn Ser Val Ser Asn Ser Gly Lys His Ser Arg Tyr Ser Ser
500 505 510

Ser Ser Ser Arg Arg Asn Ser Gly Gly Gly Gly Asp Gly Arg Ser Gly
515 520 525

Gly Gly Gly Gly Gly Gly Gly Gly Gly Asn Gly Asn His Gly Ser Arg
530 535 540

Gly Gly His Lys His Arg Asp Gly Asp Arg Ser Arg Asp Arg Lys Arg
545 550 555 560

<210> 213

<211> 2768

<212> DNA

<213> Homo sapiens

<400> 213

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gagccccgcg gctgccattc ccggccgtcg ctcggtcctc cgctgacggg aagcaggaag	120
tggcggcggg cgtcgcgagc ggtgacatca cgggggacgac ggcggcgaag ggcgggggag	180
gaggaggagc gagccggggc ggggggacgc tgcacagtct ccgggatccc caggcctgga	240
gggggggtctg tgcgcggccg gctggctctg ccccgctcc ggtcccagc gggcctccct	300
cgggcccagcc cgatgtgacc gagcccagcg gagcctgagc aaggagcggg tccgtcgcgg	360

Sequence listing as filed1.txt						
agccggaggg	cgggaggaac	atgacatcgc	ggagatgggt	tcacccaaat	atcactgggtg	420
tggaggcaga	aaacctactg	ttgacaagag	gagttgatgg	cagttttttg	gcaaggccta	480
gtaaaagtaa	ccctggagac	ttcacacttt	ccgttagaag	aaatggagct	gtcaccaca	540
tcaagattca	gaacactggg	gattactatg	acctgtatgg	aggggagaaa	tttgccactt	600
tggctgagtt	ggtccagtat	tacatggaac	atcacgggca	attaaaagag	aagaatggag	660
atgtcattga	gcttaaatat	cctctgaact	gtgcagatcc	tacctctgaa	aggtgggttc	720
atggacatct	ctctgggaaa	gaagcagaga	aattattaac	tgaaaaagga	aaacatggta	780
gttttcttgt	acgagagagc	cagagccacc	ctggagattt	tgttctttct	gtgcgcactg	840
gtgatgacaa	aggggagagc	aatgacggca	agtctaaagt	gacccatggt	atgattcgct	900
gtcaggaact	gaaatacgac	gttgggtggag	gagaacgggt	tgattctttg	acagatcttg	960
tggaacatta	taagaagaat	cctatgggtg	aaacattggg	tacagtacta	caactcaagc	1020
agccccttaa	cacgactcgt	ataaatgctg	ctgaaataga	aagcagagtt	cgagaactaa	1080
gcaaattagc	tgagaccaca	gataaagtca	aacaaggctt	ttgggaagaa	tttgagacac	1140
tacaacaaca	ggagtgcaaa	cttctctaca	gccgaaaaga	gggtcaaagg	caagaaaaca	1200
aaaacaaaaa	tagatataaa	aacatcctgc	cctttgatca	taccagggtt	gtcctacacg	1260
atggtgatcc	caatgagcct	gtttcagatt	acatcaatgc	aaatatcatc	atgcctgaat	1320
ttgaaacca	gtgcaacaat	tcaaagccca	aaaagagtta	cattgccaca	caaggctgcc	1380
tgcaaaacac	ggtgaatgac	ttttggcgga	tgggtgtcca	agaaaactcc	cgagtgattg	1440
tcatgacaac	gaaagaagtg	gagagaggaa	agagtaaagt	tgtcaaatac	tggcctgatg	1500
agtatgctct	aaaagaatat	ggcgtcatgc	gtgttaggaa	cgtcaaagaa	agcgccgctc	1560
atgactatac	gctaagagaa	cttaaacttt	caaaggtttg	acaagggaat	acggagagaa	1620
cggctctggc	ataccacttt	cggacctggc	cggaccacgg	cgtgcccagc	gaccctgggg	1680
gcgtgctgga	cttctctggg	gaggtgcacc	ataagcagga	gagcatcatg	gatgcagggc	1740
cggtcgtggt	gcactgcagt	gctggaattg	gccggacagg	gacgttcatt	gtgattgata	1800
ttcttattga	catcatcaga	gagaaagggt	ttgactgcga	tattgacgtt	cccaaaacca	1860
tccagatggg	gcggtctcag	aggtcagggg	tgggtccagac	agaagcacag	taccgattta	1920
tctatatggc	ggtccagcat	tatattgaaa	cactacagcg	caggattgaa	gaagagcaga	1980
aaagaaagag	gaaagggcac	gaatatacaa	atattaagta	ttctctagcg	gaccagacga	2040
gtggagatca	gagccctctc	ccgccttgta	ctccaacgcc	accctgtgca	gaaatgagag	2100
aagacagtgc	tagagtctat	gaaaacgtgg	gcctgatgca	acagcagaaa	agtttcagat	2160
gagaaaacct	gccaaaactt	cagcacagaa	atagatgtgg	actttcacc	tctccctaaa	2220
aagatcaaga	acagacgcaa	gaaagtttat	gtgaagacag	aatttggatt	tggaaggctt	2280

Sequence listing as filed1.txt

gcaatgtggt tgactacctt ttgataagca aaatttgaaa ccatttaaag accactgtat 2340
 tttaactcaa caatactgc ttcccaatta ctcatcttcc cagataagaa gaaatcatct 2400
 ctacaatgta gacaacatta tattttatag aatttgtttg aaattgagga agcagttaaa 2460
 ttgtgctgctg tattttgcag attatgggga ttcaaattct agtaataggc ttttttattt 2520
 ttatttttat acccttaacc agtttaattt tttttttcct cattgttggg gatgatgaga 2580
 agaaatgatt tgggaaaatt aagtaacaac gacctagaaa agtgagaaca atctcattta 2640
 ccatcatgta tccagtagtg gataattcat tttgatggct tctatttttg gccaaatgag 2700
 aattaagcca gtgcctgaga ctgtcagaag ttgaccttg cactggcatt aaagagtcac 2760
 agaaaaaa 2768

<210> 214

<211> 593

<212> PRT

<213> Homo sapiens

<400> 214

Met Thr Ser Arg Arg Trp Phe His Pro Asn Ile Thr Gly Val Glu Ala
 1 5 10 15

Glu Asn Leu Leu Leu Thr Arg Gly Val Asp Gly Ser Phe Leu Ala Arg
 20 25 30

Pro Ser Lys Ser Asn Pro Gly Asp Phe Thr Leu Ser Val Arg Arg Asn
 35 40 45

Gly Ala Val Thr His Ile Lys Ile Gln Asn Thr Gly Asp Tyr Tyr Asp
 50 55 60

Leu Tyr Gly Gly Glu Lys Phe Ala Thr Leu Ala Glu Leu Val Gln Tyr
 65 70 75 80

Tyr Met Glu His His Gly Gln Leu Lys Glu Lys Asn Gly Asp Val Ile
 85 90 95

Glu Leu Lys Tyr Pro Leu Asn Cys Ala Asp Pro Thr Ser Glu Arg Trp
 100 105 110

Phe His Gly His Leu Ser Gly Lys Glu Ala Glu Lys Leu Leu Thr Glu
 115 120 125

Sequence listing as filed1.txt

Lys Gly Lys His Gly Ser Phe Leu Val Arg Glu Ser Gln Ser His Pro
 130 135 140
 Gly Asp Phe Val Leu Ser Val Arg Thr Gly Asp Asp Lys Gly Glu Ser
 145 150 155 160
 Asn Asp Gly Lys Ser Lys Val Thr His Val Met Ile Arg Cys Gln Glu
 165 170 175
 Leu Lys Tyr Asp Val Gly Gly Gly Glu Arg Phe Asp Ser Leu Thr Asp
 180 185 190
 Leu Val Glu His Tyr Lys Lys Asn Pro Met Val Glu Thr Leu Gly Thr
 195 200 205
 Val Leu Gln Leu Lys Gln Pro Leu Asn Thr Thr Arg Ile Asn Ala Ala
 210 215 220
 Glu Ile Glu Ser Arg Val Arg Glu Leu Ser Lys Leu Ala Glu Thr Thr
 225 230 235 240
 Asp Lys Val Lys Gln Gly Phe Trp Glu Glu Phe Glu Thr Leu Gln Gln
 245 250 255
 Gln Glu Cys Lys Leu Leu Tyr Ser Arg Lys Glu Gly Gln Arg Gln Glu
 260 265 270
 Asn Lys Asn Lys Asn Arg Tyr Lys Asn Ile Leu Pro Phe Asp His Thr
 275 280 285
 Arg Val Val Leu His Asp Gly Asp Pro Asn Glu Pro Val Ser Asp Tyr
 290 295 300
 Ile Asn Ala Asn Ile Ile Met Pro Glu Phe Glu Thr Lys Cys Asn Asn
 305 310 315 320
 Ser Lys Pro Lys Lys Ser Tyr Ile Ala Thr Gln Gly Cys Leu Gln Asn
 325 330 335
 Thr Val Asn Asp Phe Trp Arg Met Val Phe Gln Glu Asn Ser Arg Val
 340 345 350
 Ile Val Met Thr Thr Lys Glu Val Glu Arg Gly Lys Ser Lys Cys Val
 355 360 365
 Lys Tyr Trp Pro Asp Glu Tyr Ala Leu Lys Glu Tyr Gly Val Met Arg
 370 375 380

Sequence listing as filed1.txt

Val Arg Asn Val Lys Glu Ser Ala Ala His Asp Tyr Thr Leu Arg Glu
385 390 395 400

Leu Lys Leu Ser Lys Val Gly Gln Gly Asn Thr Glu Arg Thr Val Trp
405 410 415

Gln Tyr His Phe Arg Thr Trp Pro Asp His Gly Val Pro Ser Asp Pro
420 425 430

Gly Gly Val Leu Asp Phe Leu Glu Glu Val His His Lys Gln Glu Ser
435 440 445

Ile Met Asp Ala Gly Pro Val Val Val His Cys Ser Ala Gly Ile Gly
450 455 460

Arg Thr Gly Thr Phe Ile Val Ile Asp Ile Leu Ile Asp Ile Ile Arg
465 470 475 480

Glu Lys Gly Val Asp Cys Asp Ile Asp Val Pro Lys Thr Ile Gln Met
485 490 495

Val Arg Ser Gln Arg Ser Gly Met Val Gln Thr Glu Ala Gln Tyr Arg
500 505 510

Phe Ile Tyr Met Ala Val Gln His Tyr Ile Glu Thr Leu Gln Arg Arg
515 520 525

Ile Glu Glu Glu Gln Lys Arg Lys Arg Lys Gly His Glu Tyr Thr Asn
530 535 540

Ile Lys Tyr Ser Leu Ala Asp Gln Thr Ser Gly Asp Gln Ser Pro Leu
545 550 555 560

Pro Pro Cys Thr Pro Thr Pro Pro Cys Ala Glu Met Arg Glu Asp Ser
565 570 575

Ala Arg Val Tyr Glu Asn Val Gly Leu Met Gln Gln Gln Lys Ser Phe
580 585 590

Arg

<210> 215

<211> 1892

<212> DNA

Sequence listing as filed1.txt

<213> Homo sapiens

<400> 215
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cctcgggccca gcccgatgtg accgagccca gcggagcctg agcaaggagc ggggtccgtcg 180
cggagccgga gggcgggagg aacatgacat cgcggagatg gtttcaccca aatatcactg 240
gtgtggaggc agaaaaccta ctgttgacaa gaggagtga tggcagtttt ttggcaaggc 300
ctagtaaaag taaccctgga gacttcacac tttccgttag aagaaatgga gctgtcaccc 360
acatcaagat tcagaacact ggtgattact atgacctgta tggaggggag aaatttgcca 420
ctttggctga gttggtccag tattacatgg aacatcacgg gcaattaaaa gagaagaatg 480
gagatgtcat tgagcttaaa tatcctctga actgtgcaga tcctacctct gaaaggtggt 540
ttcatggaca tctctctggg aaagaagcag agaaattatt aactgaaaaa ggaaaacatg 600
gtagttttct tgtacgagag agccagagcc accctggaga ttttgttctt tctgtgcgca 660
ctggtgatga caaaggggag agcaatgacg gcaagtctaa agtgacccat gttatgattc 720
gctgtcagga actgaaatac gacgttggtg gaggagaacg gtttgattct ttgacagatc 780
ttgtggaaca ttataagaag aatcctatgg tggaaacatt gggtagagta ctacaactca 840
agcagcccct taacacgact cgtataaatg ctgctgaaat agaaagcaga gttcgagaac 900
taagcaaatt agctgagacc acagataaag tcaaacaagg cttttgggaa gaatttgaga 960
cactacaaca acaggagtgc aaacttctct acagccgaaa agaggggtcaa aggcaagaaa 1020
acaaaaacaa aaatagatat aaaaacatcc tgccctttga tcataccagg gttgtcctac 1080
acgatggtga tccaatgag cctgtttcag attacatcaa tgcaaatatc atcatgcctg 1140
aatttgaaac caagtgaac aattcaaagc ccaaaaagag ttacattgcc acacaaggct 1200
gcctgcaaaa cacggtgaat gacttttggc ggatggtggt ccaagaaaac tcccagtgta 1260
ttgtcatgac aacgaaagaa gtggagagag gaaagagtaa atgtgtcaaa tactggcctg 1320
atgagtatgc tctaaaagaa tatggcgtca tgcgtgttag gaacgtcaaa gaaagcgccg 1380
ctcatgacta tacgctaaga gaacttaaac tttcaaagggt tggacaaggg aatacggaga 1440
gaacggtctg gcaataccac tttcggacct ggccggacca cggcgtgcc agcgaccctg 1500
ggggcgtgct ggacttcctg gaggaggtgc accataagca ggagagcatc atggatgcag 1560
ggccggtcgt ggtgcactgc aggtgacagc tcctgctgcc cctctaggcc acagcctgtc 1620
cctgtctcct agcggccagg gcttgctttt acctaccac tcctagctct ttaactgtag 1680
gaagaattta atatctgttt gaggcataga gcaactgcat tgagggacat tttgatccca 1740

Sequence listing as filed1.txt

aggcatattt ctcctagacc ctacagcact gccattggcc atggccatgg caacatgctc 1800
 agttaaaca gcaaagacta agtcagcatt atctctgagt ccaccagaag ttgtgcatta 1860
 aacaacttca tcctggaaaa aaaaaaaaaa aa 1892

<210> 216

<211> 460

<212> PRT

<213> Homo sapiens

<400> 216

Met Thr Ser Arg Arg Trp Phe His Pro Asn Ile Thr Gly Val Glu Ala
 1 5 10 15

Glu Asn Leu Leu Leu Thr Arg Gly Val Asp Gly Ser Phe Leu Ala Arg
 20 25 30

Pro Ser Lys Ser Asn Pro Gly Asp Phe Thr Leu Ser Val Arg Arg Asn
 35 40 45

Gly Ala Val Thr His Ile Lys Ile Gln Asn Thr Gly Asp Tyr Tyr Asp
 50 55 60

Leu Tyr Gly Gly Glu Lys Phe Ala Thr Leu Ala Glu Leu Val Gln Tyr
 65 70 75 80

Tyr Met Glu His His Gly Gln Leu Lys Glu Lys Asn Gly Asp Val Ile
 85 90 95

Glu Leu Lys Tyr Pro Leu Asn Cys Ala Asp Pro Thr Ser Glu Arg Trp
 100 105 110

Phe His Gly His Leu Ser Gly Lys Glu Ala Glu Lys Leu Leu Thr Glu
 115 120 125

Lys Gly Lys His Gly Ser Phe Leu Val Arg Glu Ser Gln Ser His Pro
 130 135 140

Gly Asp Phe Val Leu Ser Val Arg Thr Gly Asp Asp Lys Gly Glu Ser
 145 150 155 160

Asn Asp Gly Lys Ser Lys Val Thr His Val Met Ile Arg Cys Gln Glu
 165 170 175

Sequence listing as filed1.txt

Leu Lys Tyr Asp Val Gly Gly Gly Glu Arg Phe Asp Ser Leu Thr Asp
180 185 190

Leu Val Glu His Tyr Lys Lys Asn Pro Met Val Glu Thr Leu Gly Thr
195 200 205

Val Leu Gln Leu Lys Gln Pro Leu Asn Thr Thr Arg Ile Asn Ala Ala
210 215 220

Glu Ile Glu Ser Arg Val Arg Glu Leu Ser Lys Leu Ala Glu Thr Thr
225 230 235 240

Asp Lys Val Lys Gln Gly Phe Trp Glu Glu Phe Glu Thr Leu Gln Gln
245 250 255

Gln Glu Cys Lys Leu Leu Tyr Ser Arg Lys Glu Gly Gln Arg Gln Glu
260 265 270

Asn Lys Asn Lys Asn Arg Tyr Lys Asn Ile Leu Pro Phe Asp His Thr
275 280 285

Arg Val Val Leu His Asp Gly Asp Pro Asn Glu Pro Val Ser Asp Tyr
290 295 300

Ile Asn Ala Asn Ile Ile Met Pro Glu Phe Glu Thr Lys Cys Asn Asn
305 310 315 320

Ser Lys Pro Lys Lys Ser Tyr Ile Ala Thr Gln Gly Cys Leu Gln Asn
325 330 335

Thr Val Asn Asp Phe Trp Arg Met Val Phe Gln Glu Asn Ser Arg Val
340 345 350

Ile Val Met Thr Thr Lys Glu Val Glu Arg Gly Lys Ser Lys Cys Val
355 360 365

Lys Tyr Trp Pro Asp Glu Tyr Ala Leu Lys Glu Tyr Gly Val Met Arg
370 375 380

Val Arg Asn Val Lys Glu Ser Ala Ala His Asp Tyr Thr Leu Arg Glu
385 390 395 400

Leu Lys Leu Ser Lys Val Gly Gln Gly Asn Thr Glu Arg Thr Val Trp
405 410 415

Gln Tyr His Phe Arg Thr Trp Pro Asp His Gly Val Pro Ser Asp Pro
420 425 430

Sequence listing as filed1.txt

Gly Gly Val Leu Asp Phe Leu Glu Glu Val His His Lys Gln Glu Ser
435 440 445

Ile Met Asp Ala Gly Pro Val Val Val His Cys Arg
450 455 460

<210> 217

<211> 2069

<212> DNA

<213> Homo sapiens

<400> 217
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gagccccgcg gctgccattc ccggccgtcg ctcggtcctc cgctgacggg aagcaggaag 120
tggcggcggg cgtcgcgagc ggtgacatca cgggggacgac ggcggcgaag ggcgggggag 180
gaggaggagc gagccggggc ggggggacgac tgcacagtct ccgggatccc caggcctgga 240
gggggggtctg tgcgcggccg gctgggtctg ccccgcgctc ggtcccagac gggcctccct 300
cgggccagcc cgatgtgacc gagcccagcg gagcctgagc aaggagcggg tccgtcgcgg 360
agccggaggg cgggaggaac atgacatcgc ggagatggtt tcacccaaat atcactgggtg 420
tggaggcaga aaacctactg ttgacaagag gagttgatgg cagttttttg gcaaggccta 480
gtaaaagtaa ccctggagac ttcacacttt ccgttagaag aaatggagct gtcaccaca 540
tcaagattca gaacactggt gattactatg acctgtatgg aggggagaaa tttgccactt 600
tggctgagtt ggtccagtat tacatggaac atcacgggca attaaaagag aagaatggag 660
atgtcattga gcttaaatat cctctgaact gtgcagatcc tacctctgaa aggtgggttc 720
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gttttcttgt acgagagagc cagagccacc ctggagattt tgttctttct gtgcgcactg 840
gtgatgacaa aggggagagc aatgacggca agtctaaagt gacccatggt atgattcgct 900
gtcaggaact gaaatacgac gttggtggag gagaacggtt tgattctttg acagatcttg 960
tggaacatta taagaagaat cctatggtgg aaacattggg tacagtacta caactcaagc 1020
agccccctaa cagcactcgt ataaatgctg ctgaaataga aagcagagtt cgagaactaa 1080
gcaaattagc tgagaccaca gataaagtca aacaaggctt ttgggaagaa tttgagacac 1140
tacaacaaca ggagtgcaaa cttctctaca gccgaaaaga gggtaaagg caagaaaaca 1200
aaaacaaaaa tagatataaa aacatcctgc cttttgatca taccagggtt gtcctacacg 1260

Sequence listing as filed1.txt

atggtgatcc caatgagcct gtttcagatt acatcaatgc aaatatcatc atgcctgaat	1320
ttgaaaccaa gtgcaacaat tcaaagccca aaaagagtta cattgccaca caaggctgcc	1380
tgcaaaacac ggtgaatgac ttttggcgga tgggtgtcca agaaaactcc cgagtgattg	1440
tcatgacaac gaaagaagtg gagagaggaa agagtaaata tgtcaaatac tggcctgatg	1500
agtatgctct aaaagaatat ggcgtcatgc gtgttaggaa cgtcaaagaa agcgccgctc	1560
atgactatac gctaagagaa cttaaacttt caaagggttg acaagggaat acggagagaa	1620
cggctctggca ataccacttt cggacctggc cggaccacgg cgtgcccagc gacctgggg	1680
gcgtgctgga ctccctggag gaggtgcacc ataagcagga gagcatcatg gatgcagggc	1740
cggctcgtgt gcactgcagg tgacagctcc tgctgcccct ctaggccaca gcctgtccct	1800
gtctcctagc gcccagggtt tgcttttacc taccactcc tagctcttta actgtaggaa	1860
gaatttaata tctgtttgag gcatagagca actgcattga gggacatttt gatcccaagg	1920
catatttctc ctagacccta cagcactgcc attggccatg gccatggcaa catgctcagt	1980
taaaacagca aagactaagt cagcattatc tctgagtcca ccagaagttg tgcattaaac	2040
aacttcatcc tggaaaaaaaa aaaaaaaaaa	2069

<210> 218

<211> 460

<212> PRT

<213> Homo sapiens

<400> 218

Met	Thr	Ser	Arg	Arg	Trp	Phe	His	Pro	Asn	Ile	Thr	Gly	Val	Glu	Ala
1				5					10					15	

Glu	Asn	Leu	Leu	Leu	Thr	Arg	Gly	Val	Asp	Gly	Ser	Phe	Leu	Ala	Arg
		20						25					30		

Pro	Ser	Lys	Ser	Asn	Pro	Gly	Asp	Phe	Thr	Leu	Ser	Val	Arg	Arg	Asn
		35					40					45			

Gly	Ala	Val	Thr	His	Ile	Lys	Ile	Gln	Asn	Thr	Gly	Asp	Tyr	Tyr	Asp
	50					55					60				

Leu	Tyr	Gly	Gly	Glu	Lys	Phe	Ala	Thr	Leu	Ala	Glu	Leu	Val	Gln	Tyr
65					70					75					80

Tyr	Met	Glu	His	His	Gly	Gln	Leu	Lys	Glu	Lys	Asn	Gly	Asp	Val	Ile
				85					90					95	

Sequence listing as filed1.txt

Glu Leu Lys Tyr Pro Leu Asn Cys Ala Asp Pro Thr Ser Glu Arg Trp
100 105 110

Phe His Gly His Leu Ser Gly Lys Glu Ala Glu Lys Leu Leu Thr Glu
115 120 125

Lys Gly Lys His Gly Ser Phe Leu Val Arg Glu Ser Gln Ser His Pro
130 135 140

Gly Asp Phe Val Leu Ser Val Arg Thr Gly Asp Asp Lys Gly Glu Ser
145 150 155 160

Asn Asp Gly Lys Ser Lys Val Thr His Val Met Ile Arg Cys Gln Glu
165 170 175

Leu Lys Tyr Asp Val Gly Gly Gly Glu Arg Phe Asp Ser Leu Thr Asp
180 185 190

Leu Val Glu His Tyr Lys Lys Asn Pro Met Val Glu Thr Leu Gly Thr
195 200 205

Val Leu Gln Leu Lys Gln Pro Leu Asn Thr Thr Arg Ile Asn Ala Ala
210 215 220

Glu Ile Glu Ser Arg Val Arg Glu Leu Ser Lys Leu Ala Glu Thr Thr
225 230 235 240

Asp Lys Val Lys Gln Gly Phe Trp Glu Glu Phe Glu Thr Leu Gln Gln
245 250 255

Gln Glu Cys Lys Leu Leu Tyr Ser Arg Lys Glu Gly Gln Arg Gln Glu
260 265 270

Asn Lys Asn Lys Asn Arg Tyr Lys Asn Ile Leu Pro Phe Asp His Thr
275 280 285

Arg Val Val Leu His Asp Gly Asp Pro Asn Glu Pro Val Ser Asp Tyr
290 295 300

Ile Asn Ala Asn Ile Ile Met Pro Glu Phe Glu Thr Lys Cys Asn Asn
305 310 315 320

Ser Lys Pro Lys Lys Ser Tyr Ile Ala Thr Gln Gly Cys Leu Gln Asn
325 330 335

Thr Val Asn Asp Phe Trp Arg Met Val Phe Gln Glu Asn Ser Arg Val

Sequence listing as filed1.txt

340

345

350

Ile Val Met Thr Thr Lys Glu Val Glu Arg Gly Lys Ser Lys Cys Val
355 360 365

Lys Tyr Trp Pro Asp Glu Tyr Ala Leu Lys Glu Tyr Gly Val Met Arg
370 375 380

Val Arg Asn Val Lys Glu Ser Ala Ala His Asp Tyr Thr Leu Arg Glu
385 390 395 400

Leu Lys Leu Ser Lys Val Gly Gln Gly Asn Thr Glu Arg Thr Val Trp
405 410 415

Gln Tyr His Phe Arg Thr Trp Pro Asp His Gly Val Pro Ser Asp Pro
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Sequence listing as filed1.txt

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<223> Primer

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<223> Primer

<400> 221

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<211> 21

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Sequence listing as filed1.txt

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Sequence listing as filed1.txt

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Sequence listing as filed1.txt						
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Sequence listing as filed1.txt

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Sequence listing as filed1.txt

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<213> Drosophila melanogaster

<400> 225

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Ile Pro Asp Ser Ser Glu Glu Pro Ala Met Gly Val Gly Glu Glu Met
 35 40 45

Ser Ile Ile Ser Lys Thr Arg Thr Ser Thr Leu Ser Val Glu Pro Ala
 50 55 60

Lys Glu Pro Thr Val Thr Ala Glu Leu Glu Gly Glu Lys Glu Leu Glu
 65 70 75 80

Ser Asn Pro Val Ser Lys Thr Pro Arg Ser Thr Pro Thr Pro Thr Leu
 85 90 95

Thr Pro Ala Val Thr Pro Thr Ala Ser Asp Gly Val Ala Ala Lys Ser
 100 105 110

Val Arg Val Thr Arg His Ser Ser Pro Leu Leu Leu Ile Ile Ser Pro
 115 120 125

Thr Thr Ser Arg Arg Glu Val Gly Asp Gly Glu Leu Asp Thr Glu Glu
 130 135 140

Pro Thr Gly Ser Gly Gly Gln Arg Lys Ser Ser Val Glu Arg Ser Leu
 145 150 155 160

Ala Pro Val Ile Arg Gly Arg Lys Ser Ile Lys Asp Leu Lys Glu Ala
 165 170 175

Sequence listing as filed1.txt

Lys Glu Val Lys Ser Glu Glu Pro Pro Ala Ala Ala Ser Glu Ser Arg
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 Lys Asp Thr Lys Asp Lys Gly Asp Glu Arg Glu Thr Asp Gln Glu Glu
 225 230 235 240
 Glu Lys Glu Lys Ser Ala Asp Thr Glu Ile Ile Ala Asp Thr Glu Lys
 245 250 255
 Thr Ser Glu Lys Gln Lys Tyr Thr Glu Lys Asp Lys Ala Ala Asp Lys
 260 265 270
 Asp Gly Gly Lys Glu Lys Asp Ile Asp Ala Asn Lys Asp Ile Asp Lys
 275 280 285
 Glu Lys Glu Lys Val Lys Glu Val Leu Pro Pro Val Val Pro Ile Ala
 290 295 300
 Pro Val Thr Pro Thr Cys Asn Arg Val Thr Arg Lys Ser His Ala Gln
 305 310 315 320
 Glu Gln Ala Ile Asn Thr Arg Val Thr Arg Asn Arg Arg Gln Ser Ser
 325 330 335
 Thr Val Gly Ala Asn Ser Thr Ala Ser Leu Val Ala Ala Ser Ser Ser
 340 345 350
 Val Thr Glu Gln Pro Pro Pro Ser Arg Gly Arg Arg Lys Lys Pro Val
 355 360 365
 Val Val Ala Pro Pro Leu Glu Pro Ala Val Lys Arg Lys Arg Ser Gln
 370 375 380
 Asp Val Glu Ala Asp Ser Asp Ala Asn Asn Ser Thr Lys Tyr Ser Lys
 385 390 395 400
 Val Glu Val Val Lys Ser Glu Glu Ala Glu Ala Pro Glu Glu Asp Ser
 405 410 415

Ser Ala Val Pro Ile Lys Gln Glu Ser Val Asp Gly Asn Glu Val Ser
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Sequence listing as filed1.txt

420

425

430

Ser Ile Ser Pro Thr Val Thr Pro Thr Pro Thr Pro Ala Pro Thr Pro
435 440 445

Ala Pro Val Pro Gly Ser Arg Arg Gly Arg Gly Arg Pro Gln Asn Arg
450 455 460

Asn Ser Ser Ser Pro Ala Thr Thr Thr Arg Ala Thr Arg Leu Ser Lys
465 470 475 480

Ala Gly Ser Pro Val Ile Leu Thr Pro Val Ala Gln Glu Pro Ala Pro
485 490 495

Pro Lys Arg Arg Arg Val Gly Ser Ser Thr Arg Lys Thr Val Ser Ala
500 505 510

Ser Ser Leu Ala Pro Ser Ser Gln Gly Gly Ala Gly Asp Glu Asp Ser
515 520 525

Lys Asp Ser Met Ala Ser Ser Met Asp Asp Leu Leu Met Ala Ala Ala
530 535 540

Asp Ile Lys Gln Glu Lys Leu Thr Pro Asp Phe Asp Asp Ser Leu Met
545 550 555 560

Pro Glu Gly Leu Pro Ser Thr Ser Gly Ala Ser Ser Ala Asn Gly His
565 570 575

Ser Cys Thr Glu Pro Leu Thr Val Asp Thr Glu Ile Asn Val Lys Pro
580 585 590

Ala Asp Ser Lys Val Lys Pro Lys Glu Ser Pro Val Val Ala Val Glu
595 600 605

Glu Ser Pro Ser Gln Ser Glu Thr Gln Ser Ala Lys Val Ser Ala His
610 615 620

Ala Gly Lys Ala Pro Ser Leu Ser Pro Asp Met Ile Ser Glu Gly Val
625 630 635 640

Ser Ala Val Ser Val Arg Lys Phe Tyr Lys Lys Pro Glu Phe Leu Glu
645 650 655

Asn Asn Leu Gly Ile Glu Lys Asp Pro Glu Leu Gly Glu Ile Val Gln
660 665 670

Sequence listing as filed1.txt

Thr Val Ser Asn Asn Asp Thr Glu Thr Asp Val Glu Met Ala Val Asp
675 680 685

Gly Glu Val Asn Gln Pro Ser Thr Pro Lys Ser Gln Asp Lys Lys Lys
690 695 700

Glu Glu Gln Glu Lys Asn Gln Lys Ser Gly Leu Lys Ala Ala Lys Lys
705 710 715 720

Ala Pro Ala Lys Leu Glu Pro Lys Ala Glu Asp Ile Ser Glu Ile Leu
725 730 735

Thr Asp Val Pro Val Asp Ile Ser Thr Glu Ala Val Glu Ile Ile Glu
740 745 750

Glu Ala Glu Glu Asp Thr Cys Ser Asn Ser Ser Ile Lys Pro Gly Glu
755 760 765

Leu Arg Leu Asp Glu Ser Asn Asp Glu Pro Glu Leu Leu Leu Glu Asp
770 775 780

Ala Leu Ile Val Asn Gly Asp Glu Asn Glu Thr Pro Asp Gln Pro Glu
785 790 795 800

Glu Lys Glu Asp Gln Val Glu Phe Phe His Thr Gly Glu Tyr Asp Asp
805 810 815

Phe Glu His Glu Ile Met Val Glu Leu Ala Lys Glu Gly Val Leu Asp
820 825 830

Ala Ser Gly Asn Ala Leu Ser Gln Gln Lys Val Glu Leu Glu His Pro
835 840 845

Glu Asp Val Thr Leu His Glu Ser Lys Asn Asp Ile Glu Ala Glu Glu
850 855 860

Ser Val Glu Arg Lys Pro Leu Lys Asp Pro Ser Val Ala Asp Glu Met
865 870 875 880

Glu Asp Met Asn Glu Glu Ser Tyr Ile Asp Ile Lys Asp Gln Thr Asn
885 890 895

Gln Leu Leu Val Glu His Leu Ala Glu Glu Ala Met Glu Ala Asp Cys
900 905 910

Gly Pro Glu Asp Asn Lys Glu Asn Leu Ser Thr Ser Ala Ser Ser Thr
915 920 925

Sequence listing as filed1.txt

Ala Ala Asp Gly Leu Asp Ile Gln Leu Ala Ile Lys Glu Asp Asp Asp
930 935 940

Glu Glu Lys Pro Leu Ala Val Ile Ala Asp Glu Gln Lys Pro Gly Leu
945 950 955 960

Leu Leu Thr Asn Asp Met Lys Val Asp Glu Lys Pro Asn Gly Lys Gln
965 970 975

Glu Ser Val Cys Asp Glu His Val Gln Leu Val Pro Asn Leu Arg Gln
980 985 990

Glu Gln Glu Ile His Leu Gln Asn Leu Gly Leu Leu Thr His Gln Ala
995 1000 1005

Ala Glu His Arg Arg Lys Cys Leu Leu Glu Ala Gln Ala Arg Gln
1010 1015 1020

Ala Gln Met Gln Leu Gln Gln His His His His Gln His Lys Arg
1025 1030 1035

Gln Gly Ala Arg Gly Gly Gly Ser Ala Thr His Val Glu Ser Ser
1040 1045 1050

Gly Thr Leu Lys Thr Val Ile Lys Leu Asn Arg Ser Ser Asn Gly
1055 1060 1065

Gly Val Ser Gly Ser Gly Gly Leu Pro Thr Gly Thr Val Ile His
1070 1075 1080

Gly Gly Cys Gly Ser Ser Ser Ala Ser Ser Thr Ser Ser Ser Ser
1085 1090 1095

Val Gly Ser Ala Thr Arg Lys Ser Ser Gly Thr Leu Gly Ser Gly
1100 1105 1110

Ala Gly Ala Gly Ala Gly Val Arg Arg Gln Ser Leu Lys Met Thr
1115 1120 1125

Phe Gln Lys Gly Arg Ala Arg Gly His Gly Ala Ala Asp Arg Ser
1130 1135 1140

Ala Asp Gln Tyr Gly Ala His Ala Glu Asp Ser Tyr Tyr Thr Ile
1145 1150 1155

Gln Asn Glu Asn Glu Gly Ala Lys Lys Phe Val Val Thr Thr Gly
1160 1165 1170

Sequence listing as filed1.txt

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	1205					1210					1215			
Phe	Tyr	Gln	Met	Val	Lys	Lys	Asp	Glu	Lys	Glu	Lys	Ile	Leu	Ile
	1220					1225					1230			
Pro	Glu	Lys	Ala	Ser	Ser	Phe	Lys	Phe	His	Pro	Gly	Arg	Leu	Cys
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Glu	Asp	Gln	Cys	Tyr	Tyr	Cys	Ser	Gly	Lys	Phe	Gly	Leu	Tyr	Asp
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Thr	Pro	Cys	His	Val	Gly	Gln	Ile	Lys	Ser	Val	Glu	Arg	Gln	Gln
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Lys	Ile	Leu	Ala	Asn	Glu	Glu	Lys	Leu	Thr	Val	Asp	Asn	Cys	Leu
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Cys	Asp	Ala	Cys	Phe	Arg	His	Val	Asp	Arg	Arg	Ala	Asn	Val	Pro
	1295					1300					1305			
Ser	Tyr	Lys	Lys	Arg	Leu	Ser	Ala	Ser	Gly	His	Leu	Glu	Met	Gly
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Gly	Val	Ile	Thr	Glu	Ser	Gly	Gly	Glu	Ala	Gly	Ser	Thr	Ala	Ala
	1340					1345					1350			
Val	Ala	Val	Gln	Gln	Arg	Ser	Cys	Gly	Val	Lys	Asp	Cys	Val	Glu
	1355					1360					1365			
Ala	Ala	Arg	His	Ser	Leu	Arg	Arg	Lys	Cys	Ile	Arg	Lys	Arg	Val
	1370					1375					1380			
Lys	Lys	Tyr	Gln	Leu	Ser	Leu	Glu	Ile	Pro	Ala	Gly	Ser	Ser	Asn
	1385					1390					1395			
Val	Gly	Leu	Cys	Glu	Ala	His	Tyr	Asn	Thr	Val	Ile	Gln	Phe	Ser

1400

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Sequence listing as filed1.txt

Arg Val 1640	Gln Thr Phe Leu	Gln Tyr Asp Glu Pro Thr 1645	Arg Arg Leu 1650
Trp Glu 1655	Glu Leu Gln Lys	Pro Tyr Gly Asn Gln Ser 1660	Ser Phe Leu 1665
Arg His 1670	Leu Ile Leu Leu	Glu Lys Tyr Tyr Arg Asn 1675	Gly Asp Leu 1680
Val Leu 1685	Ala Pro His Ala	Ser Ser Asn Ala Thr Val 1690	Tyr Thr Glu 1695
Thr Val 1700	Arg Gln Arg Leu	Asn Ser Phe Asp His Gly 1705	His Cys Gly 1710
Gly Leu 1715	Asn Ile Ala Gly	Ser Pro Ser Ser Ser Gly 1720	Ser Gly Lys 1725
Arg Ser 1730	Gly Val Pro Gln	Pro Thr Gly Ala Ser Val 1735	Leu Ala Thr 1740
Ala Leu 1745	Thr Thr Pro Leu	Thr Ser His Ser Ser Ser 1750	Ser Ala Ser 1755
Ile Ser 1760	Ser Glu Gln His	Ser Ser Val Asp Pro Val 1765	Ile Pro Leu 1770
Val Asp 1775	Leu Asn Asp Asp	Asp Glu Gly Glu Asp Gly 1780	Ala Gly Gly 1785
Ala Gly 1790	Glu Arg Glu Ser	Thr Asn Arg Gln Gln Asp 1795	Val Ile Leu 1800
Glu Cys 1805	Leu Arg Thr Ala	Ser Val Asp Lys Leu Thr 1810	Lys Gln Leu 1815
Ser Ser 1820	Asn Ala Val Thr	Ile Ile Ala Arg Pro Lys 1825	Asp Lys Ser 1830
Gln Leu 1835	Ser Cys Asn Ser	Gly Ser Ser Thr Ser Ile 1840	Ser Ser Ser 1845
Ser Ser 1850	Ala Ile Ser Ser	Pro Glu Glu Val Ala Val 1855	Thr Lys Val 1860
Thr Ala 1865	Val Ala Pro Val	Gln Ser Lys Asp Ala Pro 1870	Pro Leu Ala 1875

Sequence listing as filed1.txt

Pro	Ala	Ser	Ser	Gly	Val	Ser	Asn	Ser	Arg	Ser	Ile	Leu	Lys	Thr
	1880					1885					1890			
Asn	Leu	Leu	Gly	Met	Asn	Lys	Ala	Val	Glu	Leu	Val	Pro	Leu	Thr
	1895					1900					1905			
Thr	Ala	Pro	His	Ala	Tyr	Lys	Pro	Thr	Gly	Cys	His	Lys	Pro	Glu
	1910					1915					1920			
Lys	Gln	Gln	Lys	Ile	Leu	Asp	Val	Ala	Asn	Lys	Gln	Pro	Gly	Ser
	1925					1930					1935			
Gln	Gly	Glu	Pro	Val	Pro	Ser	Ser	Ala	Leu	Leu	Gly	Leu	Gln	Ser
	1940					1945					1950			
Lys	Leu	Lys	Pro	Pro	Thr	His	Gln	Gln	Gln	Val	Ser	Gly	Ser	Gly
	1955					1960					1965			
Ala	Gly	Thr	Ser	Gly	Ser	Gln	Lys	Pro	Ser	Asn	Val	Ala	Gln	Leu
	1970					1975					1980			
Leu	Ser	Ser	Pro	Pro	Glu	Leu	Ile	Ser	Leu	His	Arg	Arg	Gln	Thr
	1985					1990					1995			
Ser	Gly	Ala	Ala	Ala	Gly	Ser	Ser	Ser	Phe	Leu	Gln	Gly	Lys	Arg
	2000					2005					2010			
Leu	Gln	Leu	Pro	Arg	Ser	Gly	Ala	Gly	Pro	Ser	Gly	Ala	Gly	Thr
	2015					2020					2025			
Gly	Thr	Gly	Ala	Gly	Ala	Ala	Gly	Ser	Arg	Ser	Ala	Gly	Gly	Pro
	2030					2035					2040			
Pro	Pro	Pro	Asn	Val	Val	Ile	Leu	Pro	Asp	Ala	Leu	Thr	Pro	Gln
	2045					2050					2055			
Glu	Arg	His	Glu	Ser	Lys	Ser	Trp	Lys	Pro	Thr	Leu	Ile	Pro	Leu
	2060					2065					2070			
Glu	Asp	Gln	His	Lys	Val	Pro	Asn	Lys	Ser	His	Ala	Leu	Tyr	Gln
	2075					2080					2085			
Thr	Ala	Asp	Gly	Arg	Arg	Leu	Pro	Ala	Leu	Val	Gln	Val	Gln	Ser
	2090					2095					2100			
Gly	Gly	Lys	Pro	Tyr	Leu	Ile	Ser	Ile	Phe	Asp	Tyr	Asn	Arg	Met
	2105					2110					2115			

Sequence listing as filed1.txt

Cys Ile Leu Arg Arg Glu Lys Leu Met Arg Asp Gln Leu Leu Lys
 2120 2125 2130
 Ser Asn Ala Lys Pro Lys Pro Gln Asn Gln Gln Gln Gln Gln Gly
 2135 2140 2145
 Gln Thr His Gln Gln Gln Gln Asn Ser Ala Ala Ser Ala Ala Ala
 2150 2155 2160
 Phe Ser Asn Met Val Lys Leu Ala Gln Gln His Thr Ala Arg Gln
 2165 2170 2175
 Gln Leu Gln Gln Leu Gln Gln Lys Pro Gln Gln Gln Gln Gln Leu
 2180 2185 2190
 Pro Thr Leu Gln Pro Gly Gly Val Arg Leu Ala Arg Leu Pro Gln
 2195 2200 2205
 Lys Leu Leu Met Pro Pro Leu Thr Asn Pro Gln Ile Gly Ser Gln
 2210 2215 2220
 Ala Pro Asn Leu Gln Pro Leu Leu Ser Ser Thr Leu Asp Asn Ser
 2225 2230 2235
 Asn Asn Cys Trp Leu Trp Lys Asn Phe Pro Asp Pro Asn Gln Tyr
 2240 2245 2250
 Leu Leu Asn Gly Asn Gly Gly Gly Ala Gly Ser Ser Ser Ser Lys
 2255 2260 2265
 Leu Pro His Leu Thr Ala Lys Pro Ala Thr Ala Thr Ser Ser Ser
 2270 2275 2280
 Gly Ala Ala Asn Lys Ser Ala Gly Ser Leu Phe Thr Leu Lys Gln
 2285 2290 2295
 Gln Gln His Gln Gln Lys Leu Ile Asp Asn Ala Ile Met Ser Lys
 2300 2305 2310
 Ile Pro Lys Ser Leu Thr Val Ile Pro Gln Gln Met Gly Gly Asn
 2315 2320 2325
 Thr Gly Gly Asp Met Gly Gly Ser Ser Ser Ser Gly Lys Asp
 2330 2335 2340

<210> 226

Sequence listing as filed1.txt

<211> 3774

<212> DNA

<213> Homo sapiens

<400> 226

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gctggctcct ccagcggctt ccactcgtgg acacggacgt ccgtgagctc cgtgtccgcc	180
tcgcccagcc gcttccgtgg cgcaggcgcc gcctcaagca ccgactcgct ggacacgctg	240
agcaacgggc cggaggggctg catggtggcg gtggccacct cacgcagtga gaaggagcag	300
ctgcaggcgc tgaacgaccg cttcgccggg tacatcgaca aggtgcggca gctggaggcg	360
cacaaccgca gcctggaggg cgaggctgcg gcgctgcggc agcagcaggc gggccgctcc	420
gctatgggcg agctgtacga gcgcgaggtc cgcgagatgc gcggcgcggt gctgcgcctg	480
ggcgcgggcg gcggtcagct acgcctggag caggagcacc tgctcgagga catcgcgcac	540
gtgcgccagc gcctagacga cgaggcccgg cagcgagagg aggccgaggc ggcggcccgc	600
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gacgccctga agtgcgacgt gacgtcggcg ctgcgcgaga ttcgcgcgca gcttgaaggc	840
cacgcggtgc agagcacgct gcagtccgag gagtgggttc gagtgaggct ggaccgactg	900
tcggaggcag ccaaggtgaa cacagacgct atgcgctcag cgcaggagga gataactgag	960
taccggcgtc agctgcaggc caggaccaca gagctggagg cactgaaaag caccaaggac	1020
tcactggaga ggcagcgctc tgagctggag gaccgtcatc aggccgacat tgcctcctac	1080
caggaagcca ttcagcagct ggacgctgag ctgaggaaca ccaagtggga gatggccgcc	1140
cagctgcgag aataccagga cctgctcaat gtcaagatgg ctctggatat agagatagcc	1200
gcttacagaa aactcctgga aggtgaagag tgtcggattg gctttggccc aattcctttc	1260
tcgcttccag aaggactccc caaaattccc tctgtgtcca ctcacataaa ggtgaaaagc	1320
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gaggagggca aggaggaaga aggggggtgaa gaagaggagg cagaaggggg agaagaagaa	1500
acaaagtctc ccccagcaga agaggctgca tccccagaga aggaagccaa gtcaccagta	1560
aaggaagagg caaagtcacc ggctgaggcc aagtccccag agaaggagga agcaaaatcc	1620

Sequence listing as filed1.txt

ccagccgaag tcaagtcccc tgagaaggcc aagtctccag caaaggaaga ggcaaagtca	1680
ccgcctgagg ccaagtcccc agagaaggag gaagcaaat ctccagctga ggtcaagtcc	1740
cccgagaagg ccaagtcccc agcaaaggaa gaggcaaagt caccggctga ggccaagtct	1800
ccagagaagg ccaagtcccc agtgaaggaa gaagcaaagt caccggctga ggccaagtcc	1860
ccagtgaagg aagaagcaaaa atctccagct gaggtcaagt ccccgaaaaa ggccaagtct	1920
ccaacgaagg aggaagcaaaa gtcccctgag aaggccaagt cccctgagaa ggccaagtcc	1980
ccagagaagg aagaggccaa gtcccctgag aaggccaagt cccagtgaa ggcagaagca	2040
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aagtccccag tgaaggaaga agcaaagtcc cctgagaagg ccaagtcccc agtgaaggaa	2160
gaagcaaagt cccctgagaa ggccaagtcc ccagtgaagg aagaagcaaaa gacccccgag	2220
aaggccaagt cccagtgaa ggaagaagcc aagtccccag agaaggccaa gtccccagag	2280
aaggccaaga ctcttgatgt gaagtctcca gaagccaaga ctccagcgaa ggaggaagca	2340
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gtcaaagagc ccccaaagaa ggcagaggaa gagaaagccc ctgccacacc aaaaacagag	2580
gagaagaagg acagcaagaa agaggaggca cccaagaagg aggtccaaa gcccaagggtg	2640
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gaaaaatcct ccagcacaga ccaaaaagac agcaagcctc cagagaaggc cacagaagac	3060
aaggccgcca aggggaagta aggcaggag aaaggaacat ccggaacagc caaagaaact	3120
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atatgttagc aagagagggc actcccaggc ccctgcccc atgccctccc caggcgatgg	3300
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Sequence listing as filed1.txt

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aatgaaaaaa aaaaaaaaaa tgctgttatt ctctttccct gggaaggctg ggggcagggc 3720
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<210> 227

<211> 1026

<212> PRT

<213> Homo sapiens

<400> 227

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20 25 30

Gly Ala Gly Gly Thr Arg Ser Ala Ala Gly Ser Ser Ser Gly Phe His
35 40 45

Ser Trp Thr Arg Thr Ser Val Ser Ser Val Ser Ala Ser Pro Ser Arg
50 55 60

Phe Arg Gly Ala Gly Ala Ala Ser Ser Thr Asp Ser Leu Asp Thr Leu
65 70 75 80

Ser Asn Gly Pro Glu Gly Cys Met Val Ala Val Ala Thr Ser Arg Ser
85 90 95

Glu Lys Glu Gln Leu Gln Ala Leu Asn Asp Arg Phe Ala Gly Tyr Ile
100 105 110

Asp Lys Val Arg Gln Leu Glu Ala His Asn Arg Ser Leu Glu Gly Glu
115 120 125

Ala Ala Ala Leu Arg Gln Gln Gln Ala Gly Arg Ser Ala Met Gly Glu
130 135 140

Leu Tyr Glu Arg Glu Val Arg Glu Met Arg Gly Ala Val Leu Arg Leu
145 150 155 160

Sequence listing as filed1.txt

Gly Ala Ala Arg Gly Gln Leu Arg Leu Glu Gln Glu His Leu Leu Glu
165 170 175

Asp Ile Ala His Val Arg Gln Arg Leu Asp Asp Glu Ala Arg Gln Arg
180 185 190

Glu Glu Ala Glu Ala Ala Ala Arg Ala Leu Ala Arg Phe Ala Gln Glu
195 200 205

Ala Glu Ala Ala Arg Val Asp Leu Gln Lys Lys Ala Gln Ala Leu Gln
210 215 220

Glu Glu Cys Gly Tyr Leu Arg Arg His His Gln Glu Glu Val Gly Glu
225 230 235 240

Leu Leu Gly Gln Ile Gln Gly Ser Gly Ala Ala Gln Ala Gln Met Gln
245 250 255

Ala Glu Thr Arg Asp Ala Leu Lys Cys Asp Val Thr Ser Ala Leu Arg
260 265 270

Glu Ile Arg Ala Gln Leu Glu Gly His Ala Val Gln Ser Thr Leu Gln
275 280 285

Ser Glu Glu Trp Phe Arg Val Arg Leu Asp Arg Leu Ser Glu Ala Ala
290 295 300

Lys Val Asn Thr Asp Ala Met Arg Ser Ala Gln Glu Glu Ile Thr Glu
305 310 315 320

Tyr Arg Arg Gln Leu Gln Ala Arg Thr Thr Glu Leu Glu Ala Leu Lys
325 330 335

Ser Thr Lys Asp Ser Leu Glu Arg Gln Arg Ser Glu Leu Glu Asp Arg
340 345 350

His Gln Ala Asp Ile Ala Ser Tyr Gln Glu Ala Ile Gln Gln Leu Asp
355 360 365

Ala Glu Leu Arg Asn Thr Lys Trp Glu Met Ala Ala Gln Leu Arg Glu
370 375 380

Tyr Gln Asp Leu Leu Asn Val Lys Met Ala Leu Asp Ile Glu Ile Ala
385 390 395 400

Ala Tyr Arg Lys Leu Leu Glu Gly Glu Glu Cys Arg Ile Gly Phe Gly
405 410 415

Sequence listing as filed1.txt

Pro Ile Pro Phe Ser Leu Pro Glu Gly Leu Pro Lys Ile Pro Ser Val
420 425 430

Ser Thr His Ile Lys Val Lys Ser Glu Glu Lys Ile Lys Val Val Glu
435 440 445

Lys Ser Glu Lys Glu Thr Val Ile Val Glu Glu Gln Thr Glu Glu Thr
450 455 460

Gln Val Thr Glu Glu Val Thr Glu Glu Glu Glu Lys Glu Ala Lys Glu
465 470 475 480

Glu Glu Gly Lys Glu Glu Gly Gly Glu Glu Glu Ala Glu Gly
485 490 495

Gly Glu Glu Glu Thr Lys Ser Pro Pro Ala Glu Glu Ala Ala Ser Pro
500 505 510

Glu Lys Glu Ala Lys Ser Pro Val Lys Glu Glu Ala Lys Ser Pro Ala
515 520 525

Glu Ala Lys Ser Pro Glu Lys Glu Glu Ala Lys Ser Pro Ala Glu Val
530 535 540

Lys Ser Pro Glu Lys Ala Lys Ser Pro Ala Lys Glu Glu Ala Lys Ser
545 550 555 560

Pro Pro Glu Ala Lys Ser Pro Glu Lys Glu Glu Ala Lys Ser Pro Ala
565 570 575

Glu Val Lys Ser Pro Glu Lys Ala Lys Ser Pro Ala Lys Glu Glu Ala
580 585 590

Lys Ser Pro Ala Glu Ala Lys Ser Pro Glu Lys Ala Lys Ser Pro Val
595 600 605

Lys Glu Glu Ala Lys Ser Pro Ala Glu Ala Lys Ser Pro Val Lys Glu
610 615 620

Glu Ala Lys Ser Pro Ala Glu Val Lys Ser Pro Glu Lys Ala Lys Ser
625 630 635 640

Pro Thr Lys Glu Glu Ala Lys Ser Pro Glu Lys Ala Lys Ser Pro Glu
645 650 655

Lys Ala Lys Ser Pro Glu Lys Glu Glu Ala Lys Ser Pro Glu Lys Ala
660 665 670

Sequence listing as filed1.txt

Lys Ser Pro Val Lys Ala Glu Ala Lys Ser Pro Glu Lys Ala Lys Ser
 675 680 685
 Pro Val Lys Ala Glu Ala Lys Ser Pro Glu Lys Ala Lys Ser Pro Val
 690 695 700
 Lys Glu Glu Ala Lys Ser Pro Glu Lys Ala Lys Ser Pro Val Lys Glu
 705 710 715 720
 Glu Ala Lys Ser Pro Glu Lys Ala Lys Ser Pro Val Lys Glu Glu Ala
 725 730 735
 Lys Thr Pro Glu Lys Ala Lys Ser Pro Val Lys Glu Glu Ala Lys Ser
 740 745 750
 Pro Glu Lys Ala Lys Ser Pro Glu Lys Ala Lys Thr Leu Asp Val Lys
 755 760 765
 Ser Pro Glu Ala Lys Thr Pro Ala Lys Glu Glu Ala Arg Ser Pro Ala
 770 775 780
 Asp Lys Phe Pro Glu Lys Ala Lys Ser Pro Val Lys Glu Glu Val Lys
 785 790 795 800
 Ser Pro Glu Lys Ala Lys Ser Pro Leu Lys Glu Asp Ala Lys Ala Pro
 805 810 815
 Glu Lys Glu Ile Pro Lys Lys Glu Glu Val Lys Ser Pro Val Lys Glu
 820 825 830
 Glu Glu Lys Pro Gln Glu Val Lys Val Lys Glu Pro Pro Lys Lys Ala
 835 840 845
 Glu Glu Glu Lys Ala Pro Ala Thr Pro Lys Thr Glu Glu Lys Lys Asp
 850 855 860
 Ser Lys Lys Glu Glu Ala Pro Lys Lys Glu Ala Pro Lys Pro Lys Val
 865 870 875 880
 Glu Glu Lys Lys Glu Pro Ala Val Glu Lys Pro Lys Glu Ser Lys Val
 885 890 895
 Glu Ala Lys Lys Glu Glu Ala Glu Asp Lys Lys Lys Val Pro Thr Pro
 900 905 910
 Glu Lys Glu Ala Pro Ala Lys Val Glu Val Lys Glu Asp Ala Lys Pro

Sequence listing as filed1.txt

915

920

925

Lys Glu Lys Thr Glu Val Ala Lys Lys Glu Pro Asp Asp Ala Lys Ala
930 935 940

Lys Glu Pro Ser Lys Pro Ala Glu Lys Lys Glu Ala Ala Pro Glu Lys
945 950 955 960

Lys Asp Thr Lys Glu Glu Lys Ala Lys Lys Pro Glu Glu Lys Pro Lys
965 970 975

Thr Glu Ala Lys Ala Lys Glu Asp Asp Lys Thr Leu Ser Lys Glu Pro
980 985 990

Ser Lys Pro Lys Ala Glu Lys Ala Glu Lys Ser Ser Ser Thr Asp Gln
995 1000 1005

Lys Asp Ser Lys Pro Pro Glu Lys Ala Thr Glu Asp Lys Ala Ala
1010 1015 1020

Lys Gly Lys
1025

<210> 228

<211> 3511

<212> DNA

<213> Drosophila melanogaster

<400> 228

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Sequence listing as filed1.txt

cttcgtcaag gccgatctca ccaagagact ggtattcgat agaccgaaca acattacatc	720
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Sequence listing as filed1.txt

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 acaccatcat attgcttctt cttaaaatgc t 3511

<210> 229

<211> 1004

<212> PRT

<213> Drosophila melanogaster

<400> 229

Met Ser Cys Tyr Arg Lys Arg His Phe Leu Leu Trp Leu Leu Arg Ala
 1 5 10 15
 Val Cys Met Leu His Leu Thr Ala Arg Gly Ala Tyr Ala Thr Val Gly
 20 25 30
 Leu Gln Gly Val Pro Thr Trp Ile Tyr Leu Gly Leu Lys Ser Pro Phe
 35 40 45
 Ile Glu Phe Gly Asn Gln Val Glu Gln Leu Ala Asn Ser Ser Ile Pro
 50 55 60

Sequence listing as filed1.txt

Leu Asn Met Thr Lys Asp Glu Gln Ala Asn Met His Gln Glu Gly Leu
65 70 75 80

Arg Lys Leu Gly Thr Phe Ile Lys Pro Val Asp Leu Arg Asp Ser Glu
85 90 95

Thr Gly Phe Val Lys Ala Asp Leu Thr Lys Arg Leu Val Phe Asp Arg
100 105 110

Pro Asn Asn Ile Thr Ser Arg Pro Ile His Pro Ile Gln Glu Glu Met
115 120 125

Asp Gln Lys Gln Ile Ile Leu Leu Asp Glu Asp Thr Asp Glu Asn Gly
130 135 140

Leu Pro Ala Ser Leu Thr Asp Glu Asp Arg Lys Phe Ile Val Pro Met
145 150 155 160

Ala Leu Lys Asn Ile Ser Pro Asp Pro Arg Trp Ala Ala Thr Thr Pro
165 170 175

Ser Pro Ser Ala Leu Gln Pro Asn Ala Lys Ala Ile Ser Thr Ile Val
180 185 190

Pro Ser Pro Leu Ala Gln Val Glu Gly Asp Pro Thr Ser Asn Ile Asp
195 200 205

Asp Leu Lys Lys His Ile Leu Phe Leu His Asn Met Thr Lys Thr Asn
210 215 220

Ser Asn Phe Glu Ser Lys Phe Val Lys Phe Pro Ser Leu Gln Lys Asp
225 230 235 240

Lys Ala Lys Thr Ser Gly Ala Gly Gly Ser Pro Pro Asn Pro Lys Arg
245 250 255

Pro Gln Arg Pro Ile His Gln Tyr Ser Ala Pro Ile Ala Pro Pro Thr
260 265 270

Pro Lys Val Pro Ala Pro Asp Gly Gly Gly Val Gly Gly Ala Ala Tyr
275 280 285

Asn Pro Gly Glu Gln Pro Ile Gly Gly Tyr Tyr Gln Asn Glu Glu Leu
290 295 300

Ala Asn Asn Gln Ser Leu Leu Lys Pro Thr Asp Thr Asp Ser His Pro
305 310 315 320

Sequence listing as filed1.txt

Ala Ala Gly Gly Ser Ser His Gly Gln Lys Asn Pro Ser Glu Pro Gln
325 330 335

Val Ile Leu Leu Asn Glu Thr Leu Ser Thr Glu Thr Ser Ile Glu Ala
340 345 350

Asp Arg Ser Pro Ser Ile Asn Gln Pro Lys Ala Gly Ser Pro Ala Arg
355 360 365

Thr Thr Lys Arg Pro Pro Cys Leu Arg Asn Pro Glu Ser Pro Lys Cys
370 375 380

Ile Arg Gln Arg Arg Arg Glu Glu Gln Gln Arg Gln Arg Glu Arg Asp
385 390 395 400

Glu Trp Phe Arg Gly Gln Ser Gln Tyr Met Gln Pro Arg Phe Glu Pro
405 410 415

Ile Ile Gln Thr Ile Asn Asn Thr Lys Arg Phe Ala Val Ser Ile Glu
420 425 430

Ile Pro Asp Ser Phe Lys Val Ser Ser Glu Gly Ser Asp Gly Glu Leu
435 440 445

Leu Ser Arg Val Glu Arg Ser Gln Pro Ser Ile Ser Ser Ser Ser Ser
450 455 460

Ser Ser Ser Ser Ser Ser Arg Lys Ile Met Pro Asp Tyr Ile Lys Val
465 470 475 480

Ser Met Glu Asn Asn Thr Ser Val Thr Asp Tyr Phe Lys His Asp Val
485 490 495

Val Met Thr Ser Ala Asp Val Ala Ser Asp Arg Glu Phe Leu Ile Lys
500 505 510

Asn Met Glu Glu His Gly Gly Ala Gly Ser Ala Asn Ser His His Asn
515 520 525

Asp Thr Thr Pro Thr Ala Asp Ala Tyr Ser Glu Thr Ile Asp Leu Asn
530 535 540

Pro Asn Asn Cys Tyr Ser Ala Ile Gly Leu Ser Asn Ser Gln Lys Lys
545 550 555 560

Gln Cys Val Lys His Thr Ser Val Met Pro Ala Ile Ser Arg Gly Ala
565 570 575

Sequence listing as filed1.txt

Arg Ala Ala Ile Gln Glu Cys Gln Phe Gln Phe Lys Asn Arg Arg Trp
580 585 590

Asn Cys Ser Thr Thr Asn Asp Glu Thr Val Phe Gly Pro Met Thr Ser
595 600 605

Leu Ala Ala Pro Glu Met Ala Phe Ile His Ala Leu Ala Ala Ala Thr
610 615 620

Val Thr Ser Phe Ile Ala Arg Ala Cys Arg Asp Gly Gln Leu Ala Ser
625 630 635 640

Cys Ser Cys Ser Arg Gly Ser Arg Pro Lys Gln Leu His Asp Asp Trp
645 650 655

Lys Trp Gly Gly Cys Gly Asp Asn Leu Glu Phe Ala Tyr Lys Phe Ala
660 665 670

Thr Asp Phe Ile Asp Ser Arg Glu Lys Glu Thr Asn Arg Glu Thr Arg
675 680 685

Gly Val Lys Arg Lys Arg Glu Glu Ile Asn Lys Asn Arg Met His Ser
690 695 700

Asp Asp Thr Asn Ala Phe Asn Ile Gly Ile Lys Arg Asn Lys Asn Val
705 710 715 720

Asp Ala Lys Asn Asp Thr Ser Leu Val Val Arg Asn Val Arg Lys Ser
725 730 735

Thr Glu Ala Glu Asn Ser His Ile Leu Asn Glu Asn Phe Asp Gln His
740 745 750

Leu Leu Glu Leu Glu Gln Arg Ile Thr Lys Glu Ile Leu Thr Ser Lys
755 760 765

Ile Asp Glu Glu Glu Met Ile Lys Leu Gln Glu Lys Ile Lys Gln Glu
770 775 780

Ile Val Asn Thr Lys Phe Phe Lys Gly Glu Gln Gln Pro Arg Lys Lys
785 790 795 800

Lys Arg Lys Asn Gln Arg Ala Ala Ala Asp Ala Pro Ala Tyr Pro Arg
805 810 815

Asn Gly Ile Lys Glu Ser Tyr Lys Asp Gly Gly Ile Leu Pro Arg Ser
Page 312

Sequence listing as filed1.txt

820

825

830

Thr Ala Thr Val Lys Ala Arg Ser Leu Met Asn Leu His Asn Asn Glu
835 840 845

Ala Gly Arg Arg Ala Val Ile Lys Lys Ala Arg Ile Thr Cys Lys Cys
850 855 860

His Gly Val Ser Gly Ser Cys Ser Leu Ile Thr Cys Trp Gln Gln Leu
865 870 875 880

Ser Ser Ile Arg Glu Ile Gly Asp Tyr Leu Arg Glu Lys Tyr Glu Gly
885 890 895

Ala Thr Lys Val Lys Ile Asn Lys Arg Gly Arg Leu Gln Ile Lys Asp
900 905 910

Leu Gln Phe Lys Val Pro Thr Ala His Asp Leu Ile Tyr Leu Asp Glu
915 920 925

Ser Pro Asp Trp Cys Arg Asn Ser Tyr Ala Leu His Trp Pro Gly Thr
930 935 940

His Gly Arg Val Cys His Lys Asn Ser Ser Gly Leu Glu Ser Cys Ala
945 950 955 960

Ile Leu Cys Cys Gly Arg Gly Tyr Asn Thr Lys Asn Ile Ile Val Asn
965 970 975

Glu Arg Cys Asn Cys Lys Phe His Trp Cys Cys Gln Val Lys Cys Glu
980 985 990

Val Cys Thr Lys Val Leu Glu Glu His Thr Cys Lys
995 1000

<210> 230

<211> 4114

<212> DNA

<213> Homo sapiens

<400> 230

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agcggggttc tgagtgaatt acccaggagg gactgagcac agcaccaact agagaggggt 120

cagggggtgc gggactcgag cgagcaggaa ggaggcagcg cctggcacca gggctttgac 180

Sequence listing as filed1.txt

tcaacagaat tgagacacgt ttgtaatcgc tggcgtgccc cgcgcacagg atcccagcga	240
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atcttgccat caaaaaactc acggaggaga agcgcagtca atcaacagta aacttaagag	360
acccccgatg ctcccctggt ttaacttgta tgcttgaaaa ttatctgaga gggaataaac	420
atcttttctt tcttccctct ccagaagtcc attggaatat taagcccagg agttgctttg	480
gggatggctg gaagtgcaat gtcttccaag ttcttcctag tggctttggc catatttttc	540
tccttcgccc aggttgtaat tgaagccaat tcttggtggt cgctaggtat gaataaccct	600
gttcagatgt cagaagtata tattatagga gcacagcctc tctgcagcca actggcagga	660
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gaaggcgcgga agacaggcat caaagaatgc cagtatcaat tccgacatcg acggtggaac	780
tgacgactg tggataacac ctctgttttt ggccgggtga tgcatagagg cagccgcgag	840
acggccttca catacgccgt gagcgcagca ggggtggtga acgcatgag ccgggctgct	900
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cgggactggc tctggggcgg ctgaggcgac aacatcgact atggctaccg ctttgccaag	1020
gagttcgtgg acgcccgcga gcgggagcgc atccacgcca agggctccta cgagagtgt	1080
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tgccactgca agttccactg gtgtgctac gtcaagtgca agaagtgcac ggagatcgtg	1560
gaccagtttg tgtgcaagta gtgggtgcca cccagcactc agccccgctc ccaggacccg	1620
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tattttgtgg atctttgaaa aggtaataca agacttcttt tggatagtat agaattgaagg	1860
gggaaataac acatacccta acttagctgt gtgggacatg gtacacatcc agaaggtaaa	1920
gaaatacatt ttctttttct caaatatgcc atcatatggg atgggtaggt tccagttgaa	1980
agaggggtgg agaaatctat tcacaattca gcttctatga ccaaaatgag ttgtaaattc	2040

Sequence listing as filed1.txt

tctggtgcaa gataaaaggt cttgggaaaa caaaacaaaa caaaacaaac ctcccttccc	2100
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catttgacaga cagaccgtca tattctaata gctcatgaaa tttgggcagc agggaggaaa	2280
gtccccagaa attaaaaaat ttaaaaactct tatgtcaaga tgttgatttg aagctgttat	2340
aagaattggg attccagatt tgtaaaaaga ccccaatga ttctggacac tagatttttt	2400
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gcaacaaggt aattgcgtgc cattcagcac tgcaccagag cagacaacct atttgaggaa	2580
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tccttcactg cagtccagtt gggattattc caaaagtttt ttgagtcttg agcttgggct	3180
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gtttttatta tacaaaaacc atgaagtact ttttttattt gctaaatcag attgttcctt	3900
tttagtgact catgtttatg aagagagttg agtttaacaa tcctagcttt taaaagaaac	3960

Sequence listing as filed1.txt

tattttaatgt aaaatattct acatgtcatt cagatattat gtatatcttc tagcctttat 4020
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aaacaaacat cgaaaggctt attccaaatg gaag 4114

<210> 231

<211> 365

<212> PRT

<213> Homo sapiens

<400> 231

Met Ala Gly Ser Ala Met Ser Ser Lys Phe Phe Leu Val Ala Leu Ala
1 5 10 15

Ile Phe Phe Ser Phe Ala Gln Val Val Ile Glu Ala Asn Ser Trp Trp
20 25 30

Ser Leu Gly Met Asn Asn Pro Val Gln Met Ser Glu Val Tyr Ile Ile
35 40 45

Gly Ala Gln Pro Leu Cys Ser Gln Leu Ala Gly Leu Ser Gln Gly Gln
50 55 60

Lys Lys Leu Cys His Leu Tyr Gln Asp His Met Gln Tyr Ile Gly Glu
65 70 75 80

Gly Ala Lys Thr Gly Ile Lys Glu Cys Gln Tyr Gln Phe Arg His Arg
85 90 95

Arg Trp Asn Cys Ser Thr Val Asp Asn Thr Ser Val Phe Gly Arg Val
100 105 110

Met Gln Ile Gly Ser Arg Glu Thr Ala Phe Thr Tyr Ala Val Ser Ala
115 120 125

Ala Gly Val Val Asn Ala Met Ser Arg Ala Cys Arg Glu Gly Glu Leu
130 135 140

Ser Thr Cys Gly Cys Ser Arg Ala Ala Arg Pro Lys Asp Leu Pro Arg
145 150 155 160

Asp Trp Leu Trp Gly Gly Cys Gly Asp Asn Ile Asp Tyr Gly Tyr Arg
165 170 175

Sequence listing as filed1.txt

Phe Ala Lys Glu Phe Val Asp Ala Arg Glu Arg Glu Arg Ile His Ala
180 185 190

Lys Gly Ser Tyr Glu Ser Ala Arg Ile Leu Met Asn Leu His Asn Asn
195 200 205

Glu Ala Gly Arg Arg Thr Val Tyr Asn Leu Ala Asp Val Ala Cys Lys
210 215 220

Cys His Gly Val Ser Gly Ser Cys Ser Leu Lys Thr Cys Trp Leu Gln
225 230 235 240

Leu Ala Asp Phe Arg Lys Val Gly Asp Ala Leu Lys Glu Lys Tyr Asp
245 250 255

Ser Ala Ala Ala Met Arg Leu Asn Ser Arg Gly Lys Leu Val Gln Val
260 265 270

Asn Ser Arg Phe Asn Ser Pro Thr Thr Gln Asp Leu Val Tyr Ile Asp
275 280 285

Pro Ser Pro Asp Tyr Cys Val Arg Asn Glu Ser Thr Gly Ser Leu Gly
290 295 300

Thr Gln Gly Arg Leu Cys Asn Lys Thr Ser Glu Gly Met Asp Gly Cys
305 310 315 320

Glu Leu Met Cys Cys Gly Arg Gly Tyr Asp Gln Phe Lys Thr Val Gln
325 330 335

Thr Glu Arg Cys His Cys Lys Phe His Trp Cys Cys Tyr Val Lys Cys
340 345 350

Lys Lys Cys Thr Glu Ile Val Asp Gln Phe Val Cys Lys
355 360 365

<210> 232

<211> 348

<212> DNA

<213> Drosophila melanogaster

<400> 232

atgggttgca cctgctgtga caataaaccc aagccggaga ccattgagat atattcggtg 60

aaaatccgtg agaatggtac atacaagttg atcaagatgc aattggcgga tatttggagt 120

Sequence listing as filed1.txt

cacggatggg agctgcgtat caataacttt gccgacaagg aaaagggtgcc gcacaacgag 180
aaggatattc gcaatcaggt gtcggtggcg cgcaaagcca aacagagtct gtggaacaat 240
aataagcatt ttgtgtactg gtgccgctac ggaagtcgtc agcaggatct gcgaaagcga 300
caggtaacga cgagtgccaa tcacgtgctg ctgcacctga tcaattga 348

<210> 233

<211> 115

<212> PRT

<213> Drosophila melanogaster

<400> 233

Met Gly Cys Thr Cys Cys Asp Asn Lys Pro Lys Pro Glu Thr Ile Glu
1 5 10 15

Ile Tyr Ser Val Lys Ile Arg Glu Asn Gly Thr Tyr Lys Leu Ile Lys
20 25 30

Met Gln Leu Ala Asp Ile Trp Ser His Gly Trp Glu Leu Arg Ile Asn
35 40 45

Asn Phe Ala Asp Lys Glu Lys Val Pro His Asn Glu Lys Asp Ile Arg
50 55 60

Asn Gln Val Ser Val Ala Arg Lys Ala Lys Gln Ser Leu Trp Asn Asn
65 70 75 80

Asn Lys His Phe Val Tyr Trp Cys Arg Tyr Gly Ser Arg Gln Gln Asp
85 90 95

Leu Arg Lys Arg Gln Val Thr Thr Ser Ala Asn His Val Leu Leu His
100 105 110

Leu Ile Asn
115

<210> 234

<211> 1059

<212> DNA

<213> Drosophila melanogaster

Sequence listing as filed1.txt

<400> 234
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ctgtgctgca agttaccatt accagggtcca cctgggttccc gccagttttc tttcattgtg 180
gctagttgtt gttcgtgcct tcgataaaga cgttttagagg tgtttttaga gtttcgccat 240
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aggagatctt tgacacggat atccagatcg ccaagtgtc cggcactatc aagaccatgc 360
tggaggactg cggcatggag gacgatgaga atgccattgt gccgttgccc aatgtgaatt 420
cgacgattct tcgcaagggtg cttacctggg ctactacca caaggacgac cccagccaa 480
cggaggatga tgagagcaag gagaagcgca cagacgacat tatctcatgg gatgcagatt 540
tcctaaaagt cgaccagggc aactgtttt agctgatatt ggcagcgaac tatctggaca 600
ttaagggcct tctggagctc acctgcaaga ctgttgcaaa catgattaag ggaaagactc 660
ccgaggaaat acgcaagacc ttcaacatta agaaggactt ttcgcccgc gaggaggagc 720
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acattaagtt gaaacagcta ggggattcgg gaacgaattg gatttgcagc attgcaactt 840
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ttaaattgtg tataaatgat ctgttgctga tttgattcgc ggggttcatt tttgtcgta 960
aatatatctc atatacatatc atatgacgaga ttgtaacact ctctttaacc tattggagta 1020
acacttgatt tcactttaat aaatataact acccaacac 1059

<210> 235

<211> 162

<212> PRT

<213> Drosophila melanogaster

<400> 235

Met Pro Ser Ile Lys Leu Gln Ser Ser Asp Glu Glu Ile Phe Asp Thr
1 5 10 15
Asp Ile Gln Ile Ala Lys Cys Ser Gly Thr Ile Lys Thr Met Leu Glu
20 25 30
Asp Cys Gly Met Glu Asp Asp Glu Asn Ala Ile Val Pro Leu Pro Asn
35 40 45

Sequence listing as filed1.txt

Val Asn Ser Thr Ile Leu Arg Lys Val Leu Thr Trp Ala His Tyr His
50 55 60

Lys Asp Asp Pro Gln Pro Thr Glu Asp Asp Glu Ser Lys Glu Lys Arg
65 70 75 80

Thr Asp Asp Ile Ile Ser Trp Asp Ala Asp Phe Leu Lys Val Asp Gln
85 90 95

Gly Thr Leu Phe Glu Leu Ile Leu Ala Ala Asn Tyr Leu Asp Ile Lys
100 105 110

Gly Leu Leu Glu Leu Thr Cys Lys Thr Val Ala Asn Met Ile Lys Gly
115 120 125

Lys Thr Pro Glu Glu Ile Arg Lys Thr Phe Asn Ile Lys Lys Asp Phe
130 135 140

Ser Pro Ala Glu Glu Glu Gln Val Arg Lys Glu Asn Glu Trp Cys Glu
145 150 155 160

Glu Lys

<210> 236

<211> 929

<212> DNA

<213> Drosophila melanogaster

<400> 236

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atcgtaagga aagcccaaaa tgcccagcat caagttgcaa tcttcggatg aggagatctt	180
tgacacggat atccagatcg ccaagtgctc cggcactatc aagaccatgc tggaggactg	240
cggcatggag gacgatgaga atgccattgt gccgttgccc aatgtgaatt cgacgattct	300
tcgcaagggtg cttacctggg ctactacca caaggacgac ccccagccaa cggaggatga	360
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tctggagctc acctgcaaga ctgttgcaaa catgattaag ggaaagactc ccgaggaaat	540
acgcaagacc ttcaacatta agaaggactt ttcgcccgcc gaggaggagc aggtgcgcaa	600

Sequence listing as filed1.txt

ggagaacgag tgggtgcgagg agaagtaaag cgcggcattt cgcgggacca acattaagtt	660
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ctactttcat ttacattttt ttttattttt aaccccagca gagactcgat ttaaattgtg	780
tataaatgat ctgttgctga tttgattcgc ggggttcatt ttttgtcgta aatataatctc	840
atatacatatc atatgcgaga ttgtaacact ctctttaacc tattggagta acacttgatt	900
tcactttaat aaatataact acccaacac	929

<210> 237

<211> 162

<212> PRT

<213> Drosophila melanogaster

<400> 237

Met	Pro	Ser	Ile	Lys	Leu	Gln	Ser	Ser	Asp	Glu	Glu	Ile	Phe	Asp	Thr	1	5	10	15
Asp	Ile	Gln	Ile	Ala	Lys	Cys	Ser	Gly	Thr	Ile	Lys	Thr	Met	Leu	Glu	20	25	30	
Asp	Cys	Gly	Met	Glu	Asp	Asp	Glu	Asn	Ala	Ile	Val	Pro	Leu	Pro	Asn	35	40	45	
Val	Asn	Ser	Thr	Ile	Leu	Arg	Lys	Val	Leu	Thr	Trp	Ala	His	Tyr	His	50	55	60	
Lys	Asp	Asp	Pro	Gln	Pro	Thr	Glu	Asp	Asp	Glu	Ser	Lys	Glu	Lys	Arg	65	70	75	80
Thr	Asp	Asp	Ile	Ile	Ser	Trp	Asp	Ala	Asp	Phe	Leu	Lys	Val	Asp	Gln	85	90	95	
Gly	Thr	Leu	Phe	Glu	Leu	Ile	Leu	Ala	Ala	Asn	Tyr	Leu	Asp	Ile	Lys	100	105	110	
Gly	Leu	Leu	Glu	Leu	Thr	Cys	Lys	Thr	Val	Ala	Asn	Met	Ile	Lys	Gly	115	120	125	
Lys	Thr	Pro	Glu	Glu	Ile	Arg	Lys	Thr	Phe	Asn	Ile	Lys	Lys	Asp	Phe	130	135	140	
Ser	Pro	Ala	Glu	Glu	Glu	Gln	Val	Arg	Lys	Glu	Asn	Glu	Trp	Cys	Glu	145	150	155	160

Sequence listing as filed1.txt

Glu Lys

<210> 238

<211> 879

<212> DNA

<213> Drosophila melanogaster

<400> 238

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aggagatctt tgacacggat atccagatcg ccaagtgtctc cggcactatc aagaccatgc      180
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cgacgattct tcgcaagggtg cttacctggg ctcactacca caaggacgac cccagccaa      300
cggaggatga tgagagcaag gagaagcgca cagacgacat tatctcatgg gatgcagatt      360
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ccgaggaaat acgcaagacc ttcaacatta agaaggactt ttcgcccgcc gaggaggagc      540
aggtgcgcaa ggagaacgag tgggtgaggg agaagtaaag cgcggcattt cgcgggacca      600
acattaagtt gaaacagcta ggggattcgg gaacgaattg gatttgcagc attgcaactt      660
tacttagttg ctactttcat ttacattttt ttttattttt aaccccagca gagactcgat      720
ttaaattgtg tataaatgat ctgttgctga tttgattcgc ggggttcatt ttttgtcgta      780
aatatatctc atatacatatc atatgcgaga ttgtaacact ctctttaacc tattggagta      840
acacttgatt tcactttaat aaatataact acccaacac      879

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<210> 239

<211> 162

<212> PRT

<213> Drosophila melanogaster

<400> 239

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Met Pro Ser Ile Lys Leu Gln Ser Ser Asp Glu Glu Ile Phe Asp Thr
1           5           10           15

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Sequence listing as filed1.txt

Asp Ile Gln Ile Ala Lys Cys Ser Gly Thr Ile Lys Thr Met Leu Glu
20 25 30

Asp Cys Gly Met Glu Asp Asp Glu Asn Ala Ile Val Pro Leu Pro Asn
35 40 45

Val Asn Ser Thr Ile Leu Arg Lys Val Leu Thr Trp Ala His Tyr His
50 55 60

Lys Asp Asp Pro Gln Pro Thr Glu Asp Asp Glu Ser Lys Glu Lys Arg
65 70 75 80

Thr Asp Asp Ile Ile Ser Trp Asp Ala Asp Phe Leu Lys Val Asp Gln
85 90 95

Gly Thr Leu Phe Glu Leu Ile Leu Ala Ala Asn Tyr Leu Asp Ile Lys
100 105 110

Gly Leu Leu Glu Leu Thr Cys Lys Thr Val Ala Asn Met Ile Lys Gly
115 120 125

Lys Thr Pro Glu Glu Ile Arg Lys Thr Phe Asn Ile Lys Lys Asp Phe
130 135 140

Ser Pro Ala Glu Glu Glu Gln Val Arg Lys Glu Asn Glu Trp Cys Glu
145 150 155 160

Glu Lys

<210> 240

<211> 576

<212> DNA

<213> Homo sapiens

<400> 240

gcctcccagc tctcgtcagc ctctgctgg ccatctcctt aacaccaaac actatgcctt	60
caattcagtt gcagagtttt gatggagaga tatttgcagt tgatgtggaa attgccaaac	120
aatctgtgac tatcaagacc acgttggaag atttgggaat ggatgatgaa ggagatgacc	180
cagttcctct accaaatgtg aatgcagcag tattaaaaaa ggtcattcag tgggtgcaccc	240
accacaagga tgaccctcct cccctgaag atgatgagaa caaagaaaag caaacagacg	300
atatccctgt ttgggaccaa gaattcctga aagttgctca aggaacactt tttgaactca	360

Sequence listing as filed1.txt

ttcgggctgc aaactactta gacatcaaag gtttgcttga tgttacatgc aagactgttg	420
ccaatatgat caaggggaaa actcctgagg agattcgcaa gacattcaat atcaaaaatg	480
actttactga agaggaggaa gcccaggtac gcaaagagaa ccagtgggtgt gaagagaagt	540
gaaatgttgt gcctgacact gtaacactgt aaggat	576

<210> 241

<211> 162

<212> PRT

<213> Homo sapiens

<400> 241

Met	Pro	Ser	Ile	Gln	Leu	Gln	Ser	Phe	Asp	Gly	Glu	Ile	Phe	Ala	Val
1				5					10					15	
Asp	Val	Glu	Ile	Ala	Lys	Gln	Ser	Val	Thr	Ile	Lys	Thr	Thr	Leu	Glu
		20						25					30		
Asp	Leu	Gly	Met	Asp	Asp	Glu	Gly	Asp	Asp	Pro	Val	Pro	Leu	Pro	Asn
		35					40					45			
Val	Asn	Ala	Ala	Val	Leu	Lys	Lys	Val	Ile	Gln	Trp	Cys	Thr	His	His
	50					55					60				
Lys	Asp	Asp	Pro	Pro	Pro	Pro	Glu	Asp	Asp	Glu	Asn	Lys	Glu	Lys	Gln
65						70				75					80
Thr	Asp	Asp	Ile	Pro	Val	Trp	Asp	Gln	Glu	Phe	Leu	Lys	Val	Ala	Gln
				85					90					95	
Gly	Thr	Leu	Phe	Glu	Leu	Ile	Arg	Ala	Ala	Asn	Tyr	Leu	Asp	Ile	Lys
			100					105					110		
Gly	Leu	Leu	Asp	Val	Thr	Cys	Lys	Thr	Val	Ala	Asn	Met	Ile	Lys	Gly
		115					120					125			
Lys	Thr	Pro	Glu	Glu	Ile	Arg	Lys	Thr	Phe	Asn	Ile	Lys	Asn	Asp	Phe
		130				135					140				
Thr	Glu	Glu	Glu	Glu	Ala	Gln	Val	Arg	Lys	Glu	Asn	Gln	Trp	Cys	Glu
145					150					155					160

Glu Lys

Sequence listing as filed1.txt

<210> 242

<211> 1872

<212> DNA

<213> *Drosophila melanogaster*

<400> 242

ttagtcacag caacgcacac acacactacc aaacggctac attttttttc gagtgtgttc	60
gacattcata atttttgtgg tggagctgcc tgcaaaatcg aattttatca gtttgccaac	120
gaagttatcg gccataactg caaataaagt tcagcaataa cttggcgctg ttacgatctc	180
aacgagaagg tccagactca acccgcgttt ccagttcacc gcgtaaaagg aaccagctaa	240
acgatgtcca gcctgccacg tcgcatcatc aaggagactc aacgtttgat gcaggagcca	300
gtgcctggga tcaatgccat tcccgatgag aacaatgcc gttacttcca tgtgatcgtg	360
accggaccga acgattcgcc cttcgagggc ggcgtgttca agctggagct gttcctaccg	420
gaggactatc caatgtcagc gcccaaagtg cgcttcatca cgaagatcta ccatccgaac	480
atcgatcgtt tgggccgcat ttgcctcgac gtgctgaagg acaagtggag tccagccctg	540
cagatccgga ccatattgct atccattcag gcactgctca gtgcaccaa tcccgcgat	600
ccgctggcca acgatgtggc tgagttgtgg aagggtcaac aggcggaggc cattcgcaat	660
gcccgcgagt ggaccagaa atatgccgtc gaagactgaa cgcccagggt caggaggaaa	720
gtcagaaaagc ggatccgtca gttgtatcgg cgtttttcca gaaagtgggt gcgtgacatg	780
aacgggaggc tgggtaaatt gaatacttta aaagcaacca gaaaaaccta aaacatacga	840
aagaaaacat aaaataagaa aaaagtaagg aagcaaacat aaaaaaaaaac gatttaagaa	900
cacatTTTTT tttcgaacct tctggggcgg gatatacata taaaatatta atatatatat	960
TTTTTcaac caatcgatcg gggcgatcgg cgaaatggag gagagatagc gaaagcattc	1020
tttatgtaag acgtatacat gtatccgaaa caaactaaaa acgaaaaaaaa aaaaaaaaaa	1080
aaaaaacagt aattggTTTT agtcgtttct attgatttgt tcgaggggtc tgggtgtctat	1140
atacatatag ccgtatataa ttctatgtgt aactgaaata accaaccat aaccattaac	1200
acatgtagca tcagatatga taaatcaatt ggaaaggcaa acaagaaggg attttgattt	1260
cctttaactc gtcatttgaa aactcggctt aaatgtcaat tcaaaataga gaattttgat	1320
tgtatcattt tcagtgtttc agaaaattta agatgtgatc gtccaacttg tagactttac	1380
ttttctaac taagagtcca ccatttcgat tgatacttga gctttgcctg ggttgtgtca	1440
gagtccttt gataaacgat aaatagtttt tactcgaaaa caattttttt taaccaaaca	1500

Sequence listing as filed1.txt

atgaagcctt taagctatta gtaatttttg aaaaaaaaaa aaataaaaaa tatatatata 1560
 aaaaatatac aaaaatatga tacatgatca aaatacaatg aatgcataca ctatatattt 1620
 atacaaaaaa aatacaaaaa gaaaaacaaa agtagtggct tgattgctg aaaatttcaa 1680
 gtgcagttct caacaaaaat tgtgtacagt aattaaatgt ttgtcaccga aatcactaaa 1740
 ggataatcca aaaaacaata gcaaccgaaa agcaaccata aatcaaagag taagcgaaaa 1800
 taaaaattca gttttcttta attttaatta atttttttct aagaaaaata aataaaaaacg 1860
 aaaaattcaa at 1872

<210> 243

<211> 151

<212> PRT

<213> Drosophila melanogaster

<400> 243

Met Ser Ser Leu Pro Arg Arg Ile Ile Lys Glu Thr Gln Arg Leu Met
 1 5 10 15

Gln Glu Pro Val Pro Gly Ile Asn Ala Ile Pro Asp Glu Asn Asn Ala
 20 25 30

Arg Tyr Phe His Val Ile Val Thr Gly Pro Asn Asp Ser Pro Phe Glu
 35 40 45

Gly Gly Val Phe Lys Leu Glu Leu Phe Leu Pro Glu Asp Tyr Pro Met
 50 55 60

Ser Ala Pro Lys Val Arg Phe Ile Thr Lys Ile Tyr His Pro Asn Ile
 65 70 75 80

Asp Arg Leu Gly Arg Ile Cys Leu Asp Val Leu Lys Asp Lys Trp Ser
 85 90 95

Pro Ala Leu Gln Ile Arg Thr Ile Leu Leu Ser Ile Gln Ala Leu Leu
 100 105 110

Ser Ala Pro Asn Pro Asp Asp Pro Leu Ala Asn Asp Val Ala Glu Leu
 115 120 125

Trp Lys Val Asn Glu Ala Glu Ala Ile Arg Asn Ala Arg Glu Trp Thr
 130 135 140

Sequence listing as filed1.txt

Gln Lys Tyr Ala Val Glu Asp
145 150

<210> 244

<211> 1203

<212> DNA

<213> Homo sapiens

<400> 244

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actcgtgcgt gaggcgagag gagccggaga cgagaccaga ggccgaactc gggttctgac      60
aagatggccg ggctgccccg caggatcatc aaggaaaccc agcgtttgct ggcagaacca      120
gttcctggca tcaaagccga accagatgag agcaacgccc gttattttca tgtggtcatt      180
gctggccctc aggattcccc ctttgaggga gggactttta aacttgaact attccttcca      240
gaagaatacc caatggcagc ccctaaagta cgtttcatga ccaaaattta tcataccta      300
gtagacaagt tgggaagaat atgttttagat attttgaaag ataagtgggc cccagcactg      360
cagatccgca cagttctgct atcgatccag gccttgtaa gtgctccaa tccagatgat      420
ccattagcaa atgatgtagc ggagcagtgg aagaccaacg aagccaagc catagaaaca      480
gctagagcat ggactaggct atatgccatg aataatattt aaattgatac gatcatcaag      540
tgtgcatcac ttctcctggt ctgccaagac ttcctcctct ttgtttgcat ttaatggaca      600
cagtcttaga aacattacag aataaaaaag cccagacatc ttcagtcctt tggtgattaa      660
atgcacatta gcaaatctat gtcttgtcct gattcactgt cataaagcat gagcagaggc      720
tagaagtatc atctggattg ttgtgaaacg tttaaaagca gtggcccctc cctgctttta      780
ttcatttccc ccatcctggt ttaagtataa agcactgtga atgaaggtag ttgtcagggt      840
agctgcaggg gtgtggggtg ttttatttta ttttatttta ttttattttt gaggggggag      900
gtagtttaat tttatgggct cctttcccc ttttttggtg atctaattgc attggttaaa      960
agcagctaac caggctctta gaatatgctc tagccaagtc taactttatt tagacgctgt     1020
agatggacaa gcttgattgt tggaaccaa atgggaacat taaacaaaca tcacagccct     1080
cactaataac attgctgtca agtgtagatt ccccccttca aaaaaagctt gtgaccattt     1140
tgtatggctt gtctggaaac ttctgtaaat cttatgtttt agtaaaatat tttttgttat     1200
tct                                                                                   1203
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<210> 245

<211> 152

Sequence listing as filed1.txt

<212> PRT

<213> Homo sapiens

<400> 245

Met Ala Gly Leu Pro Arg Arg Ile Ile Lys Glu Thr Gln Arg Leu Leu
1 5 10 15

Ala Glu Pro Val Pro Gly Ile Lys Ala Glu Pro Asp Glu Ser Asn Ala
20 25 30

Arg Tyr Phe His Val Val Ile Ala Gly Pro Gln Asp Ser Pro Phe Glu
35 40 45

Gly Gly Thr Phe Lys Leu Glu Leu Phe Leu Pro Glu Glu Tyr Pro Met
50 55 60

Ala Ala Pro Lys Val Arg Phe Met Thr Lys Ile Tyr His Pro Asn Val
65 70 75 80

Asp Lys Leu Gly Arg Ile Cys Leu Asp Ile Leu Lys Asp Lys Trp Ser
85 90 95

Pro Ala Leu Gln Ile Arg Thr Val Leu Leu Ser Ile Gln Ala Leu Leu
100 105 110

Ser Ala Pro Asn Pro Asp Asp Pro Leu Ala Asn Asp Val Ala Glu Gln
115 120 125

Trp Lys Thr Asn Glu Ala Gln Ala Ile Glu Thr Ala Arg Ala Trp Thr
130 135 140

Arg Leu Tyr Ala Met Asn Asn Ile
145 150

<210> 246

<211> 1927

<212> DNA

<213> Drosophila melanogaster

<400> 246

tcgcagaacc gaacacgtca gctacgggga ttgattgtta aacaacgttt ctatcgcccc 60

gcaaattccga tccgtagcag cagtccatcc tgcgccgtcc gcatccgatc cgcgaagtat 120

Sequence listing as filed1.txt

tttccagggc	aaaaacgtca	aacgcagcag	caaaatggta	ttaattgctg	cggctgtctg	180
cacgaagaat	ggcaaagtga	ttctgtcacg	tcagttcgtc	gagatgacga	aggcacgcat	240
cgagggactg	ctggctgcct	ttcccaagct	gatgactgct	ggcaagcagc	acacttacgt	300
ggagacggac	tccgtgcgct	acgtctacca	gccgatggag	aaactatata	tgctgctcat	360
caccactaag	gccagcaaca	ttctggagga	tctggagacc	ctgcgcctct	tctcgaaagt	420
gattcccag	tacagccact	cgctcgacga	gaaggagatt	gtggagaatg	ccttcaatct	480
gatcttcgca	tttgacgaga	tcgtggcact	cggctacagg	gagagcgtca	acttggccca	540
gatcaagacc	ttcgtggaga	tggactcaca	tgaggagaag	gtctaccagg	cagtgcgtca	600
gacgcaggag	cgtgatgcgc	gccagaagat	gcgcgagaag	gccaaggaac	tgcagcggca	660
gcgcatggag	gccagcaaac	ggggtggctc	ctccctgggt	ggcattggca	gccgcagcgg	720
cggcttttagc	gccgacggaa	ttggcagtag	cggcgtgagc	agcagttccg	gtgcctccag	780
cgccaacacc	ggcatcacct	ccatcgatgt	ggacaccaa	tccaaggcgg	ctgccagtaa	840
accagcttcc	cgcaatgccc	tcaagctagg	tggcaagtcc	aaggacgtcg	atagtttcgt	900
ggatcagctg	aagaacgagg	gcgagaagat	tgccaatctg	gcaccggcgg	cgcccgtg	960
aggttccagt	gctgcagcta	gcgccagtgc	agcggccaag	gcagctatcg	cgctcgacat	1020
tcacaaagag	agcgtacatc	tgaagattga	ggacaagcta	gtagtgcgtc	tgggacgcga	1080
tgggtggcgtg	cagcagttcg	agaactcggg	cctcctgacg	ttgcgcatta	cggacgagggc	1140
ctacggacgc	attttgctga	agctgtctcc	caaccacaca	cagggcctgc	agttgcagac	1200
ccaccccaac	gtggacaagg	agctgttcaa	gtcgcgcact	accatcggac	taaagaactt	1260
gggcaagccg	tttcccctta	acaccgatgt	gggtgtgctc	aagtggcgct	tcgtctcgca	1320
ggacgagtcg	gcagtcccgc	tgaccattaa	ctgctggcca	tcggataatg	gagaggggtg	1380
atgcgatgtt	aacattgagt	atgaactgga	ggcgcagcag	ctagagctgc	aggacgtggc	1440
cattgtcatt	cccttgccaa	tgaatgtgca	gccttcggtg	gcggagtacg	acggcaccta	1500
caactacgat	tcacgcaagc	atgtgctcca	gtggcacatt	ccaataatcg	atgccgccaa	1560
caagtccggt	tctatggagt	tcagctgcag	tgccctcatt	cccggtgact	tcttcccctt	1620
gcaggtgtcc	ttcgtctcga	aaacgccgta	tgccggcgctc	gtggcccagg	atgtggtgca	1680
ggtggacagc	gaggcggcgg	tcaagtattc	aagcgagtcc	attctgttcg	tggaaaagta	1740
cgagatcgtg	taggccgcgc	cgctggccac	gccaccta	gtagtacata	aatatacata	1800
atttccggg	gtcatccgat	gcgatgcaat	taattcaact	gctgcagcat	gttgagaatt	1860
atttttccat	gtgcgaactt	tacatatatta	tggcgcagac	agcttctcag	agcgagtaat	1920
tgattcc						1927

Sequence listing as filed1.txt

<210> 247

<211> 532

<212> PRT

<213> Drosophila melanogaster

<400> 247

Met Val Leu Ile Ala Ala Ala Val Cys Thr Lys Asn Gly Lys Val Ile
1 5 10 15

Leu Ser Arg Gln Phe Val Glu Met Thr Lys Ala Arg Ile Glu Gly Leu
20 25 30

Leu Ala Ala Phe Pro Lys Leu Met Thr Ala Gly Lys Gln His Thr Tyr
35 40 45

Val Glu Thr Asp Ser Val Arg Tyr Val Tyr Gln Pro Met Glu Lys Leu
50 55 60

Tyr Met Leu Leu Ile Thr Thr Lys Ala Ser Asn Ile Leu Glu Asp Leu
65 70 75 80

Glu Thr Leu Arg Leu Phe Ser Lys Val Ile Pro Glu Tyr Ser His Ser
85 90 95

Leu Asp Glu Lys Glu Ile Val Glu Asn Ala Phe Asn Leu Ile Phe Ala
100 105 110

Phe Asp Glu Ile Val Ala Leu Gly Tyr Arg Glu Ser Val Asn Leu Ala
115 120 125

Gln Ile Lys Thr Phe Val Glu Met Asp Ser His Glu Glu Lys Val Tyr
130 135 140

Gln Ala Val Arg Gln Thr Gln Glu Arg Asp Ala Arg Gln Lys Met Arg
145 150 155 160

Glu Lys Ala Lys Glu Leu Gln Arg Gln Arg Met Glu Ala Ser Lys Arg
165 170 175

Gly Gly Pro Ser Leu Gly Gly Ile Gly Ser Arg Ser Gly Gly Phe Ser
180 185 190

Ala Asp Gly Ile Gly Ser Ser Gly Val Ser Ser Ser Ser Gly Ala Ser
195 200 205

Sequence listing as filed1.txt

Ser Ala Asn Thr Gly Ile Thr Ser Ile Asp Val Asp Thr Lys Ser Lys
210 215 220

Ala Ala Ala Ser Lys Pro Ala Ser Arg Asn Ala Leu Lys Leu Gly Gly
225 230 235 240

Lys Ser Lys Asp Val Asp Ser Phe Val Asp Gln Leu Lys Asn Glu Gly
245 250 255

Glu Lys Ile Ala Asn Leu Ala Pro Ala Ala Pro Ala Gly Gly Ser Ser
260 265 270

Ala Ala Ala Ser Ala Ser Ala Ala Ala Lys Ala Ala Ile Ala Ser Asp
275 280 285

Ile His Lys Glu Ser Val His Leu Lys Ile Glu Asp Lys Leu Val Val
290 295 300

Arg Leu Gly Arg Asp Gly Gly Val Gln Gln Phe Glu Asn Ser Gly Leu
305 310 315 320

Leu Thr Leu Arg Ile Thr Asp Glu Ala Tyr Gly Arg Ile Leu Leu Lys
325 330 335

Leu Ser Pro Asn His Thr Gln Gly Leu Gln Leu Gln Thr His Pro Asn
340 345 350

Val Asp Lys Glu Leu Phe Lys Ser Arg Thr Thr Ile Gly Leu Lys Asn
355 360 365

Leu Gly Lys Pro Phe Pro Leu Asn Thr Asp Val Gly Val Leu Lys Trp
370 375 380

Arg Phe Val Ser Gln Asp Glu Ser Ala Val Pro Leu Thr Ile Asn Cys
385 390 395 400

Trp Pro Ser Asp Asn Gly Glu Gly Gly Cys Asp Val Asn Ile Glu Tyr
405 410 415

Glu Leu Glu Ala Gln Gln Leu Glu Leu Gln Asp Val Ala Ile Val Ile
420 425 430

Pro Leu Pro Met Asn Val Gln Pro Ser Val Ala Glu Tyr Asp Gly Thr
435 440 445

Tyr Asn Tyr Asp Ser Arg Lys His Val Leu Gln Trp His Ile Pro Ile
450 455 460

Sequence listing as filed1.txt

Ile Asp Ala Ala Asn Lys Ser Gly Ser Met Glu Phe Ser Cys Ser Ala
465 470 475 480

Ser Ile Pro Gly Asp Phe Phe Pro Leu Gln Val Ser Phe Val Ser Lys
485 490 495

Thr Pro Tyr Ala Gly Val Val Ala Gln Asp Val Val Gln Val Asp Ser
500 505 510

Glu Ala Ala Val Lys Tyr Ser Ser Glu Ser Ile Leu Phe Val Glu Lys
515 520 525

Tyr Glu Ile Val
530

<210> 248

<211> 1998

<212> DNA

<213> Homo sapiens

<400> 248

cgggcggttc ctgtcaaggg ggcagcaggt ccagagctgc tgggtgctccc gttccccaga	60
ccctaccctt atccccagtg gagccggagt gcggcgcgcc ccaccaccgc cctcaccatg	120
gtgctgttgg cagcagcggg ctgcacaaaa gcaggaaagg ctattgtttc tcgacagttt	180
gtggaaatga cccgaactcg gattgagggc ttattagcag cttttccaaa gctcatgaac	240
actggaaaac aacatacggt tgttgaaaca gagagtgtaa gatatgtcta ccagcctatg	300
gagaaaactgt atatggtact gatcactacc aaaaacagca acattttaga agatttggag	360
accctaaggc tcttctcaag agtgatccct gaatattgcc gagccttaga agagaatgaa	420
atatctgagc actgttttga ttgtattttt gcttttgatg aaattgtcgc actgggatac	480
cgggagaatg ttaacttggc acagatcaga accttcacag aaatggattc tcatgaggag	540
aaggtgttca gagccgtcag agagactcaa gaacgtgaag ctaaggctga gatgcgtcgt	600
aaagcaaagg aattacaaca ggcccgaaga gatgcagaga gacagggcaa aaaagcacca	660
ggatttggcg gatttggcag ctctgcagta tctggaggca gcacagctgc catgatcaca	720
gagaccatca ttgaaactga taaacaaaaa gtggcacctg caccagccag gccttcaggc	780
cccagcaagg ctttaaaact tggagccaaa ggaaaggaag tagataactt tgtggacaaa	840
ttaaaatctg aaggtgaaac catcatgtcc tctagtatgg gcaagcgtac ttctgaagca	900

Sequence listing as filed1.txt

accaaaatgc atgctccacc cattaatatg gaaagtgtac atatgaagat tgaagaaaag 960
 ataacattaa cctgtggacg agacggagga ttacagaata tggagttgca tggcatgatc 1020
 atgcttagga tctcagatga caagtatggc cgaattcgtc ttcattgtgga aaatgaagat 1080
 aagaaagggg tgcagctaca gacccatcca aatgtggata aaaaactttt cactgcagag 1140
 tctctaattg gcctgaagaa tccagagaag tcatttccag tcaacagtga cgtaggggtg 1200
 ctaaagtgga gactacaaac cacagaggaa tcttttattc cactgacaat taattgctgg 1260
 ccctcggaga gtggaaatgg ctgtgatgtc aacatagaat atgagctaca agaagataat 1320
 ttagaactga atgatgtggg tatcaccatc ccactcccgt ctggtgtcgg cgcgctgtt 1380
 atcgggtgaga tcgatgggga gtatcgacat gacagtcgac gaaataccct ggagtgggtc 1440
 ctgcctgtga ttgatgcca aaataagagt ggcagcctgg agtttagcat tgctgggcag 1500
 cccaatgact tcttccctgt tcaagtttcc tttgtctcca agaaaaatta ctgtaacata 1560
 caggttacca aagtgaccca ggtagatgga aacagccccg tcaggttttc cacagagacc 1620
 actttcctag tggataagta tgaaatcctg taataccaag aagagggagc tgaaaaggaa 1680
 aattttcaga ttaataaaga agacgccaat gatggctgaa gagtttttcc cagatttaca 1740
 agccactgga gacccctttt ttctgataca atgcacgatt ctctgcgcgc aaggaccctc 1800
 gactcacccc catgtttcag tgtcacagag acattctttg ataaggaaat ggcacaaaca 1860
 taaagggaaa ggctgctaatt tttctttggc agattgtatt ggccagcagg aaagcaagct 1920
 ctccagagaa tgccccagc taaataacctc ctctaccttt acctaagttg ctcctttatt 1980
 tttattttat aataataa 1998

<210> 249

<211> 511

<212> PRT

<213> Homo sapiens

<400> 249

Met Val Leu Leu Ala Ala Ala Val Cys Thr Lys Ala Gly Lys Ala Ile
 1 5 10 15

Val Ser Arg Gln Phe Val Glu Met Thr Arg Thr Arg Ile Glu Gly Leu
 20 25 30

Leu Ala Ala Phe Pro Lys Leu Met Asn Thr Gly Lys Gln His Thr Phe
 35 40 45

Sequence listing as filed1.txt

Val Glu Thr Glu Ser Val Arg Tyr Val Tyr Gln Pro Met Glu Lys Leu
50 55 60

Tyr Met Val Leu Ile Thr Thr Lys Asn Ser Asn Ile Leu Glu Asp Leu
65 70 75 80

Glu Thr Leu Arg Leu Phe Ser Arg Val Ile Pro Glu Tyr Cys Arg Ala
85 90 95

Leu Glu Glu Asn Glu Ile Ser Glu His Cys Phe Asp Leu Ile Phe Ala
100 105 110

Phe Asp Glu Ile Val Ala Leu Gly Tyr Arg Glu Asn Val Asn Leu Ala
115 120 125

Gln Ile Arg Thr Phe Thr Glu Met Asp Ser His Glu Glu Lys Val Phe
130 135 140

Arg Ala Val Arg Glu Thr Gln Glu Arg Glu Ala Lys Ala Glu Met Arg
145 150 155 160

Arg Lys Ala Lys Glu Leu Gln Gln Ala Arg Arg Asp Ala Glu Arg Gln
165 170 175

Gly Lys Lys Ala Pro Gly Phe Gly Gly Phe Gly Ser Ser Ala Val Ser
180 185 190

Gly Gly Ser Thr Ala Ala Met Ile Thr Glu Thr Ile Ile Glu Thr Asp
195 200 205

Lys Pro Lys Val Ala Pro Ala Pro Ala Arg Pro Ser Gly Pro Ser Lys
210 215 220

Ala Leu Lys Leu Gly Ala Lys Gly Lys Glu Val Asp Asn Phe Val Asp
225 230 235 240

Lys Leu Lys Ser Glu Gly Glu Thr Ile Met Ser Ser Ser Met Gly Lys
245 250 255

Arg Thr Ser Glu Ala Thr Lys Met His Ala Pro Pro Ile Asn Met Glu
260 265 270

Ser Val His Met Lys Ile Glu Glu Lys Ile Thr Leu Thr Cys Gly Arg
275 280 285

Asp Gly Gly Leu Gln Asn Met Glu Leu His Gly Met Ile Met Leu Arg
290 295 300

Sequence listing as filed1.txt

Ile Ser Asp Asp Lys Tyr Gly Arg Ile Arg Leu His Val Glu Asn Glu
305 310 315 320

Asp Lys Lys Gly Val Gln Leu Gln Thr His Pro Asn Val Asp Lys Lys
325 330 335

Leu Phe Thr Ala Glu Ser Leu Ile Gly Leu Lys Asn Pro Glu Lys Ser
340 345 350

Phe Pro Val Asn Ser Asp Val Gly Val Leu Lys Trp Arg Leu Gln Thr
355 360 365

Thr Glu Glu Ser Phe Ile Pro Leu Thr Ile Asn Cys Trp Pro Ser Glu
370 375 380

Ser Gly Asn Gly Cys Asp Val Asn Ile Glu Tyr Glu Leu Gln Glu Asp
385 390 400

Asn Leu Glu Leu Asn Asp Val Val Ile Thr Ile Pro Leu Pro Ser Gly
405 410 415

Val Gly Ala Pro Val Ile Gly Glu Ile Asp Gly Glu Tyr Arg His Asp
420 425 430

Ser Arg Arg Asn Thr Leu Glu Trp Cys Leu Pro Val Ile Asp Ala Lys
435 440 445

Asn Lys Ser Gly Ser Leu Glu Phe Ser Ile Ala Gly Gln Pro Asn Asp
450 455 460

Phe Phe Pro Val Gln Val Ser Phe Val Ser Lys Lys Asn Tyr Cys Asn
465 470 475 480

Ile Gln Val Thr Lys Val Thr Gln Val Asp Gly Asn Ser Pro Val Arg
485 490 495

Phe Ser Thr Glu Thr Thr Phe Leu Val Asp Lys Tyr Glu Ile Leu
500 505 510

<210> 250

<211> 1515

<212> DNA

<213> Drosophila melanogaster

Sequence listing as filed1.txt

<400> 250
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gcactgcgtc atgtccacaa gttcgatgtc atccatcgcg acgtgaagcc gagcaacttt 180
ctctacaatc gacgtcggcg agagtttctc ctcgtcgatt tcggtctggc ccagcatgtg 240
aatcctccgg ctgcgcgatc ttccggaagt gccgccgcca tcgccgcagc caacaacaaa 300
aacaacaaca ataataacaa taataatagc aaacggccac gagagcgcga atcaaagggg 360
gatgtgcagc aaattgcgct ggatgctggt ttgggtggag cagtgaagcg tatgcgtttg 420
cacgaggagt ccaacaagat gcccctgaaa ccggtcaacg atattgcgcc aagcgatgcg 480
ccggagcagt cagtagatgg gtccaatcac gtccagccac agctagtgca gcaagagcag 540
caacaactgc agccgcaaca gcagcagcaa caacagcagc agcaacaaca gtcgcaacag 600
cagcagcagc cgcagcagca gtcgcaacag cagcaccac aacgacagcc acaactggcg 660
cagatggatc aaacagcatc gacgccatct ggcagcaagt acaatacgaa tcgaaatgtc 720
tcggcagcag cggctaataa tgccaagtgc gtttgctttg caaatccctc agtttgccctc 780
aactgtctga tgaagaagga ggtgcacgcc tccagggcag gaacacctgg ctatcggccg 840
cccgaggttc tgctcaagta cccagatcag accactgccg tggacgtttg ggcggcgggt 900
gtgatattcc ttctgatcat gtcaacggtg tatccgtttt tcaaagcgcc caacgatttt 960
atcgcgctgg ccgagattgt aacaatatct ggagatcagg cgatacggaa gacggccttg 1020
gctctcgacc gtatgatcac cctgagccag aggtccaggc cactgaatct gcgaaagttg 1080
tgcttgcgct ttctgctatc ttccgttttt agtgatgcca agctcctcaa gagctacgaa 1140
tctgtggacg gaagctgcga agtggtgccg aattgtgatc aatacttctt caactgccta 1200
tgcgaggata gcgattactt gacagagcca ctggacgcat acgaatgttt tccaccagc 1260
gcctatgacc tactggatcg cctgctcgag attaatcccc ataaacgaat taccgccgaa 1320
gaggcactaa agcatccatt ctttacggcc gccgaggagg ccgagcagac ggagcaggat 1380
cagttggcca atggaacgcc gcgcaagatg cgtcgacaaa gatatcaaag tcacagaacg 1440
gtggccgcct cacaggagca ggtcaagcag caggttgccc ttgatctgca gcaagcggcc 1500
attaacaagc tgtga 1515

<210> 251

<211> 504

<212> PRT

<213> *Drosophila melanogaster*

Sequence listing as filed1.txt

<400> 251

Met Arg Tyr Asp Ala Ser Ala Ala Phe Val Met Pro Phe Met Ala His
1 5 10 15

Asp Arg Phe Gln Asp Phe Tyr Thr Arg Met Asp Val Pro Glu Ile Arg
20 25 30

Gln Tyr Met Arg Asn Leu Leu Val Ala Leu Arg His Val His Lys Phe
35 40 45

Asp Val Ile His Arg Asp Val Lys Pro Ser Asn Phe Leu Tyr Asn Arg
50 55 60

Arg Arg Arg Glu Phe Leu Leu Val Asp Phe Gly Leu Ala Gln His Val
65 70 75 80

Asn Pro Pro Ala Ala Arg Ser Ser Gly Ser Ala Ala Ala Ile Ala Ala
85 90 95

Ala Asn Asn Lys Asn Asn Asn Asn Asn Asn Asn Asn Asn Ser Lys Arg
100 105 110

Pro Arg Glu Arg Glu Ser Lys Gly Asp Val Gln Gln Ile Ala Leu Asp
115 120 125

Ala Gly Leu Gly Gly Ala Val Lys Arg Met Arg Leu His Glu Glu Ser
130 135 140

Asn Lys Met Pro Leu Lys Pro Val Asn Asp Ile Ala Pro Ser Asp Ala
145 150 155 160

Pro Glu Gln Ser Val Asp Gly Ser Asn His Val Gln Pro Gln Leu Val
165 170 175

Gln Gln Glu Gln Gln Gln Leu Gln Pro Gln Gln Gln Gln Gln Gln Gln
180 185 190

Gln Gln Gln Gln Gln Ser Gln Gln Gln Gln Gln Pro Gln Gln Gln Ser
195 200 205

Gln Gln Gln His Pro Gln Arg Gln Pro Gln Leu Ala Gln Met Asp Gln
210 215 220

Thr Ala Ser Thr Pro Ser Gly Ser Lys Tyr Asn Thr Asn Arg Asn Val
225 230 235 240

Sequence listing as filed1.txt

Ser Ala Ala Ala Ala Asn Asn Ala Lys Cys Val Cys Phe Ala Asn Pro
245 250 255

Ser Val Cys Leu Asn Cys Leu Met Lys Lys Glu Val His Ala Ser Arg
260 265 270

Ala Gly Thr Pro Gly Tyr Arg Pro Pro Glu Val Leu Leu Lys Tyr Pro
275 280 285

Asp Gln Thr Thr Ala Val Asp Val Trp Ala Ala Gly Val Ile Phe Leu
290 295 300

Ser Ile Met Ser Thr Val Tyr Pro Phe Phe Lys Ala Pro Asn Asp Phe
305 310 315 320

Ile Ala Leu Ala Glu Ile Val Thr Ile Phe Gly Asp Gln Ala Ile Arg
325 330 335

Lys Thr Ala Leu Ala Leu Asp Arg Met Ile Thr Leu Ser Gln Arg Ser
340 345 350

Arg Pro Leu Asn Leu Arg Lys Leu Cys Leu Arg Phe Arg Tyr Arg Ser
355 360 365

Val Phe Ser Asp Ala Lys Leu Leu Lys Ser Tyr Glu Ser Val Asp Gly
370 375 380

Ser Cys Glu Val Cys Arg Asn Cys Asp Gln Tyr Phe Phe Asn Cys Leu
385 390 395 400

Cys Glu Asp Ser Asp Tyr Leu Thr Glu Pro Leu Asp Ala Tyr Glu Cys
405 410 415

Phe Pro Pro Ser Ala Tyr Asp Leu Leu Asp Arg Leu Leu Glu Ile Asn
420 425 430

Pro His Lys Arg Ile Thr Ala Glu Glu Ala Leu Lys His Pro Phe Phe
435 440 445

Thr Ala Ala Glu Glu Ala Glu Gln Thr Glu Gln Asp Gln Leu Ala Asn
450 455 460

Gly Thr Pro Arg Lys Met Arg Arg Gln Arg Tyr Gln Ser His Arg Thr
465 470 475 480

Val Ala Ala Ser Gln Glu Gln Val Lys Gln Gln Val Ala Leu Asp Leu
485 490 495

Sequence listing as filed1.txt

Gln Gln Ala Ala Ile Asn Lys Leu
500

<210> 252

<211> 1725

<212> DNA

<213> Homo sapiens

<400> 252

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cggtttcagg	ctgaaggctc	tttaaaaaaa	aacgagcaga	attttaaact	tgccaggtgtt	120
aaaaaagata	ttgagaagct	ttatgaagct	gtaccacagc	ttagtaatgt	gtttaagatt	180
gaggacaaaa	ttggagaagg	cactttcagc	tctgtttatt	tggccacagc	acagttacaa	240
gtaggacctg	aagagaaaat	tgctgtaaaa	cacttgattc	caacaagtca	tcctataaga	300
attgcagctg	aacttcagtg	cctaacagtg	gctggggggc	aagataatgt	catgggagtt	360
aaatactgct	ttaggaagaa	tgatcatgta	gttattgcta	tgccatatct	ggagcatgag	420
tcgttttttg	acattctgaa	ttctctttcc	tttcaagaag	tacgggaata	tatgcttaat	480
ctgttcaaa	ctttgaaacg	cattcatcag	tttggtattg	ttcaccgtga	tgtaagccc	540
agcaattttt	tatataatag	gcgcctgaaa	aagtatgcct	tggtagactt	tggtttggcc	600
caaggaaccc	atgatacgaa	aatagagctt	cttaaatttg	tccagtctga	agctcagcag	660
gaaagggtgt	cacaaaacaa	atcccacata	atcacaggaa	acaagattcc	actgagtggc	720
ccagtaccta	aggagctgga	tcagcagtcc	accacaaaag	cttctgttaa	aagaccctac	780
acaaatgcac	aaattcagat	taaacaagga	aaagacggaa	aggagggatc	tgtaggcctt	840
tctgtccagc	gctctgtttt	tggagaaaga	aatttcaata	tacacagctc	catttcacat	900
gagagcccctg	cagtgaaact	catgaagcag	tcaaagactg	tggatgtact	gtctagaaa	960
ttagcaacaa	aaaagaaggc	tatttctacg	aaagttatga	atagtgtgt	gatgaggaaa	1020
actgccagtt	cttgcccagc	tagcctgacc	tgtgactgct	atgcaacaga	taaagtttgt	1080
agtatttgcc	tttcaaggcg	tcagcagggt	gcccctaggg	caggtacacc	aggattcaga	1140
gcaccagagg	tcttgacaaa	gtgcccgaat	caaactacag	caattgacat	gtggtctgca	1200
gggtgcatat	ttctttcttt	gcttagtgga	cgatatccat	tttataaagc	aagtgtgat	1260
ttactgctt	tggcccaa	tatgacaatt	aggggatcca	gagaaactat	ccaagctgct	1320
aaaacttttg	ggaaatcaat	attatgtagc	aaagaagttc	cagcacaaga	cttgagaaaa	1380
ctctgtgaga	gactcagggg	tatggattct	agcactccca	agttaacaag	tgatatacag	1440

Sequence listing as filed1.txt

gggcatgctt ctcacaaacc agctatttca gagaagactg accataaagc ttcttgcctc 1500
gttcaaacac ctccaggaca atactcaggg aattcattta aaaaggggga tagtaatagc 1560
tgtgagcatt gttttgatga gtataatacc aatttagaag gctggaatga ggtacctgat 1620
gaagcttatg acctgcttga taaacttcta gatctaaatc cagcttcaag aataacagca 1680
gaagaagctt tggtgcatcc attttttaaa gatatgagct tgtga 1725

<210> 253

<211> 574

<212> PRT

<213> Homo sapiens

<400> 253

Met Glu Ala Ser Leu Gly Ile Gln Met Asp Glu Pro Met Ala Phe Ser
1 5 10 15

Pro Gln Arg Asp Arg Phe Gln Ala Glu Gly Ser Leu Lys Lys Asn Glu
20 25 30

Gln Asn Phe Lys Leu Ala Gly Val Lys Lys Asp Ile Glu Lys Leu Tyr
35 40 45

Glu Ala Val Pro Gln Leu Ser Asn Val Phe Lys Ile Glu Asp Lys Ile
50 55 60

Gly Glu Gly Thr Phe Ser Ser Val Tyr Leu Ala Thr Ala Gln Leu Gln
65 70 75 80

Val Gly Pro Glu Glu Lys Ile Ala Val Lys His Leu Ile Pro Thr Ser
85 90 95

His Pro Ile Arg Ile Ala Ala Glu Leu Gln Cys Leu Thr Val Ala Gly
100 105 110

Gly Gln Asp Asn Val Met Gly Val Lys Tyr Cys Phe Arg Lys Asn Asp
115 120 125

His Val Val Ile Ala Met Pro Tyr Leu Glu His Glu Ser Phe Leu Asp
130 135 140

Ile Leu Asn Ser Leu Ser Phe Gln Glu Val Arg Glu Tyr Met Leu Asn
145 150 155 160

Sequence listing as filed1.txt

Leu Phe Lys Ala Leu Lys Arg Ile His Gln Phe Gly Ile Val His Arg
 165 170 175
 Asp Val Lys Pro Ser Asn Phe Leu Tyr Asn Arg Arg Leu Lys Lys Tyr
 180 185 190
 Ala Leu Val Asp Phe Gly Leu Ala Gln Gly Thr His Asp Thr Lys Ile
 195 200 205
 Glu Leu Leu Lys Phe Val Gln Ser Glu Ala Gln Gln Glu Arg Cys Ser
 210 215 220
 Gln Asn Lys Ser His Ile Ile Thr Gly Asn Lys Ile Pro Leu Ser Gly
 225 230 235 240
 Pro Val Pro Lys Glu Leu Asp Gln Gln Ser Thr Thr Lys Ala Ser Val
 245 250 255
 Lys Arg Pro Tyr Thr Asn Ala Gln Ile Gln Ile Lys Gln Gly Lys Asp
 260 265 270
 Gly Lys Glu Gly Ser Val Gly Leu Ser Val Gln Arg Ser Val Phe Gly
 275 280 285
 Glu Arg Asn Phe Asn Ile His Ser Ser Ile Ser His Glu Ser Pro Ala
 290 295 300
 Val Lys Leu Met Lys Gln Ser Lys Thr Val Asp Val Leu Ser Arg Lys
 305 310 315 320
 Leu Ala Thr Lys Lys Lys Ala Ile Ser Thr Lys Val Met Asn Ser Ala
 325 330 335
 Val Met Arg Lys Thr Ala Ser Ser Cys Pro Ala Ser Leu Thr Cys Asp
 340 345 350
 Cys Tyr Ala Thr Asp Lys Val Cys Ser Ile Cys Leu Ser Arg Arg Gln
 355 360 365
 Gln Val Ala Pro Arg Ala Gly Thr Pro Gly Phe Arg Ala Pro Glu Val
 370 375 380
 Leu Thr Lys Cys Pro Asn Gln Thr Thr Ala Ile Asp Met Trp Ser Ala
 385 390 395 400
 Gly Val Ile Phe Leu Ser Leu Leu Ser Gly Arg Tyr Pro Phe Tyr Lys
 405 410 415

Sequence listing as filed1.txt

Ala Ser Asp Asp Leu Thr Ala Leu Ala Gln Ile Met Thr Ile Arg Gly
420 425 430

Ser Arg Glu Thr Ile Gln Ala Ala Lys Thr Phe Gly Lys Ser Ile Leu
435 440 445

Cys Ser Lys Glu Val Pro Ala Gln Asp Leu Arg Lys Leu Cys Glu Arg
450 455 460

Leu Arg Gly Met Asp Ser Ser Thr Pro Lys Leu Thr Ser Asp Ile Gln
465 470 475 480

Gly His Ala Ser His Gln Pro Ala Ile Ser Glu Lys Thr Asp His Lys
485 490 495

Ala Ser Cys Leu Val Gln Thr Pro Pro Gly Gln Tyr Ser Gly Asn Ser
500 505 510

Phe Lys Lys Gly Asp Ser Asn Ser Cys Glu His Cys Phe Asp Glu Tyr
515 520 525

Asn Thr Asn Leu Glu Gly Trp Asn Glu Val Pro Asp Glu Ala Tyr Asp
530 535 540

Leu Leu Asp Lys Leu Leu Asp Leu Asn Pro Ala Ser Arg Ile Thr Ala
545 550 555 560

Glu Glu Ala Leu Leu His Pro Phe Phe Lys Asp Met Ser Leu
565 570

<210> 254

<211> 3477

<212> DNA

<213> Drosophila melanogaster

<400> 254

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aataactagta acagtaataa taataataac aacggtataa gccagccgat taaaataaccg	120
ctaaccgagc gcttctcatc gcaaacatcg acgggctcgg cggatagcgg tgtaattgtt	180
tccagtgcac cgcagcagca actgcagttg ccaccaccac gcagtagcag tggatcgctg	240
agtctgccac aagcgccacc tggcggcaag tggcggcaga agcagcagcg ccaacagttg	300

Sequence listing as filed1.txt

ctgctcagcc	aggacagcgg	catcgaaaat	ggtgtcacca	ctcgtccatc	gaaagccaag	360
gacaaccagg	gtgcgggaaa	agccagtcac	aatgccacaa	gctcgaagga	gagcggcgcg	420
cagtcgaaca	gcagcagcga	gagcctgggc	agcaattgct	ccgaggccca	ggagcagcag	480
agagtaagag	cctcctccgc	tctggagctc	agcagcgtgg	acactcccgt	gatcgtcggc	540
ggtgtggtca	gtggaggcaa	cagcatcttg	cgcagccgca	ttaagtacaa	gagtacgaac	600
agcaccggaa	cccagggatt	cgatgtggag	gatcgcacg	atgagggtga	tatctgtgat	660
gatgatgatg	tcgactgcga	tgatcgcgga	tcggagatcg	aggaggagga	ggaggaccaa	720
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ccggatcagg	cggaaactac	agtggcggcg	gccatggcac	gtcgacgcga	tgccaagagc	840
ctggccaccg	acggtcacat	atatttccca	ctgctcaaga	tcagcgagga	tccgcacatt	900
gattcgaagc	tgatcaatcg	caaggatggc	ctccaggaca	ccatgtatta	tttggacgaa	960
ttcggcagtc	caaagttgcg	agagaagttc	gcccgcgaagc	agaagcagct	gctcgccaag	1020
cagcagaagc	agttgatgaa	acgtgaaagg	aggagcgagg	agcagcgcaa	gaagcgaaac	1080
accaccgtgg	catccaactt	ggcggccagc	ggagcgggtg	tggacgacac	caaagatgat	1140
tacaaacaac	aaccacactg	tgatactagc	tctaggagca	aaaataactc	ggtacccaat	1200
ccaccagca	gccatctcca	tcagaaccac	aatcatctcg	ttgtggatgt	gcaagaggat	1260
gtggatgatg	tgaatgtggt	tgccaccagc	gacgtggaca	gtggtgtcgt	caagatgcgc	1320
cgccatagcc	acgataacca	ctacgaccga	attccccgga	gcaatgctgc	caccattacc	1380
acccgccctc	aaatcgacca	acagtcgtcg	caccaccaga	acaccgagga	tgtggagcaa	1440
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gatgggagtg	gcgagaacgt	taagactgcc	aaattggcca	gaacacagtc	ctgcaaaaac	1560
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caagacagac	gatttaagaa	tcgcgaattg	caaataatgc	gcaaattgga	gcattgtaat	1800
attgtgaagc	ttttgtactt	tttctattcg	agtgggtgaaa	agcgtgatga	agtatttttg	1860
aatttagtcc	tcgaatatat	accagaaacc	gtatacaaag	tggctcgcca	atatgccaaa	1920
accaagcaaa	cgataccaat	caactttatt	cggctctaca	tgtatcaact	gttcagaagt	1980
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ctcgatccgg	agacgggtgt	gctgaagctc	tgtgactttg	gcagcgccaa	acagctgctg	2100
cacggcgagc	cgaatgtatc	gtatatctgc	tcccgggtatt	accgcgcccc	cgagctcatc	2160
tttggcgcca	tcaattatac	aacaaagatc	gatgtctgga	gtgccgggtg	cgttttggcc	2220

Sequence listing as filed1.txt

gaactgctgc tgggccagcc catcttccct ggcgattccg gtgtggatca gctcgtcgag 2280
gtcatcaagg tcctggggcac accgacaaga gaacagatac gcgaaatgaa tccaaactac 2340
acggaattca agttccctca gattaagagt catccatggc agaaagtttt ccgtatacgc 2400
actcctacag aagctatcaa cttggtgtcc ctgctgctcg agtatacgc cagtgccagg 2460
atcacaccgc tcaaggcctg cgcacatccg ttcttcgatg agctacgcat ggagggtaat 2520
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tccgctgtgg ctgccggagg agccaatgcc gccgtcgtcg gcggtgctgg tgggtggtggc 2940
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ggcggcgcca atgtaacaga ttcatagggg aaatagtaac atacatacac aactaaata 3060
tatatccaag catatatata tagtaatcat tatatataac acctacacc acaacaaca 3120
caacagcaat tatatataat aaccataaac aagaatggag aaagccaatc cagcaatcac 3180
agcaaaactat atacacaaca acaacaatta aattaattaa tgcaattgat gaaagaacag 3240
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aacagcaaag gcataaaata taacaaaaga aatattttac ttaggtaaaa cattaaattt 3360
attttaaatc taaaataaac taataagcat taaataatac atgataatgg taaataaaca 3420
cacaataatt ataatagtag agcgagcgct gatcgattgt cattttattg ctgccgc 3477

<210> 255

<211> 1008

<212> PRT

<213> Drosophila melanogaster

<400> 255

Met Phe Thr Phe Tyr Thr Asn Ile Asn Asn Thr Leu Ile Asn Asn Asn
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Asn Asn Asn Asn Asn Thr Ser Asn Ser Asn Asn Asn Asn Asn Val
20 25 30

Sequence listing as filed1.txt

Ile Ser Gln Pro Ile Lys Ile Pro Leu Thr Glu Arg Phe Ser Ser Gln
35 40 45

Thr Ser Thr Gly Ser Ala Asp Ser Gly Val Ile Val Ser Ser Ala Ser
50 55 60

Gln Gln Gln Leu Gln Leu Pro Pro Pro Arg Ser Ser Ser Gly Ser Leu
65 70 75 80

Ser Leu Pro Gln Ala Pro Pro Gly Gly Lys Trp Arg Gln Lys Gln Gln
85 90 95

Arg Gln Gln Leu Leu Leu Ser Gln Asp Ser Gly Ile Glu Asn Gly Val
100 105 110

Thr Thr Arg Pro Ser Lys Ala Lys Asp Asn Gln Gly Ala Gly Lys Ala
115 120 125

Ser His Asn Ala Thr Ser Ser Lys Glu Ser Gly Ala Gln Ser Asn Ser
130 135 140

Ser Ser Glu Ser Leu Gly Ser Asn Cys Ser Glu Ala Gln Glu Gln Gln
145 150 155 160

Arg Val Arg Ala Ser Ser Ala Leu Glu Leu Ser Ser Val Asp Thr Pro
165 170 175

Val Ile Val Gly Gly Val Val Ser Gly Gly Asn Ser Ile Leu Arg Ser
180 185 190

Arg Ile Lys Tyr Lys Ser Thr Asn Ser Thr Gly Thr Gln Gly Phe Asp
195 200 205

Val Glu Asp Arg Ile Asp Glu Val Asp Ile Cys Asp Asp Asp Asp Val
210 215 220

Asp Cys Asp Asp Arg Gly Ser Glu Ile Glu Glu Glu Glu Asp Gln
225 230 235 240

Thr Glu Gln Glu Glu Glu Val Asp Glu Val Asp Ala Lys Pro Lys Asn
245 250 255

Arg Leu Leu Pro Pro Asp Gln Ala Glu Leu Thr Val Ala Ala Ala Met
260 265 270

Ala Arg Arg Arg Asp Ala Lys Ser Leu Ala Thr Asp Gly His Ile Tyr
275 280 285

Sequence listing as filed1.txt

Phe Pro Leu Leu Lys Ile Ser Glu Asp Pro His Ile Asp Ser Lys Leu
 290 295 300
 Ile Asn Arg Lys Asp Gly Leu Gln Asp Thr Met Tyr Tyr Leu Asp Glu
 305 310 315 320
 Phe Gly Ser Pro Lys Leu Arg Glu Lys Phe Ala Arg Lys Gln Lys Gln
 325 330 335
 Leu Leu Ala Lys Gln Gln Lys Gln Leu Met Lys Arg Glu Arg Arg Ser
 340 345 350
 Glu Glu Gln Arg Lys Lys Arg Asn Thr Thr Val Ala Ser Asn Leu Ala
 355 360 365
 Ala Ser Gly Ala Val Val Asp Asp Thr Lys Asp Asp Tyr Lys Gln Gln
 370 375 380
 Pro His Cys Asp Thr Ser Ser Arg Ser Lys Asn Asn Ser Val Pro Asn
 385 390 395 400
 Pro Pro Ser Ser His Leu His Gln Asn His Asn His Leu Val Val Asp
 405 410 415
 Val Gln Glu Asp Val Asp Asp Val Asn Val Val Ala Thr Ser Asp Val
 420 425 430
 Asp Ser Gly Val Val Lys Met Arg Arg His Ser His Asp Asn His Tyr
 435 440 445
 Asp Arg Ile Pro Arg Ser Asn Ala Ala Thr Ile Thr Thr Arg Pro Gln
 450 455 460
 Ile Asp Gln Gln Ser Ser His His Gln Asn Thr Glu Asp Val Glu Gln
 465 470 475 480
 Gly Ala Glu Pro Gln Ile Asp Gly Glu Ala Asp Leu Asp Ala Asp Ala
 485 490 495
 Asp Ala Asp Ser Asp Gly Ser Gly Glu Asn Val Lys Thr Ala Lys Leu
 500 505 510
 Ala Arg Thr Gln Ser Cys Lys Asn Gln Thr Gly Arg Asp Gly Ser Lys
 515 520 525
 Ile Thr Thr Val Val Ala Thr Pro Gly Gln Gly Thr Asp Arg Val Gln
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Sequence listing as filed1.txt

530

535

540

Glu Val Ser Tyr Thr Asp Thr Lys Val Ile Gly Asn Gly Ser Phe Gly
 545 550 555 560

Val Val Phe Gln Ala Lys Leu Cys Asp Thr Gly Glu Leu Val Ala Ile
 565 570 575

Lys Lys Val Leu Gln Asp Arg Arg Phe Lys Asn Arg Glu Leu Gln Ile
 580 585 590

Met Arg Lys Leu Glu His Cys Asn Ile Val Lys Leu Leu Tyr Phe Phe
 595 600 605

Tyr Ser Ser Gly Glu Lys Arg Asp Glu Val Phe Leu Asn Leu Val Leu
 610 615 620

Glu Tyr Ile Pro Glu Thr Val Tyr Lys Val Ala Arg Gln Tyr Ala Lys
 625 630 635 640

Thr Lys Gln Thr Ile Pro Ile Asn Phe Ile Arg Leu Tyr Met Tyr Gln
 645 650 655

Leu Phe Arg Ser Leu Ala Tyr Ile His Ser Leu Gly Ile Cys His Arg
 660 665 670

Asp Ile Lys Pro Gln Asn Leu Leu Leu Asp Pro Glu Thr Ala Val Leu
 675 680 685

Lys Leu Cys Asp Phe Gly Ser Ala Lys Gln Leu Leu His Gly Glu Pro
 690 695 700

Asn Val Ser Tyr Ile Cys Ser Arg Tyr Tyr Arg Ala Pro Glu Leu Ile
 705 710 715 720

Phe Gly Ala Ile Asn Tyr Thr Thr Lys Ile Asp Val Trp Ser Ala Gly
 725 730 735

Cys Val Leu Ala Glu Leu Leu Leu Gly Gln Pro Ile Phe Pro Gly Asp
 740 745 750

Ser Gly Val Asp Gln Leu Val Glu Val Ile Lys Val Leu Gly Thr Pro
 755 760 765

Thr Arg Glu Gln Ile Arg Glu Met Asn Pro Asn Tyr Thr Glu Phe Lys
 770 775 780

Sequence listing as filed1.txt

Phe Pro Gln Ile Lys Ser His Pro Trp Gln Lys Val Phe Arg Ile Arg
785 790 795 800

Thr Pro Thr Glu Ala Ile Asn Leu Val Ser Leu Leu Leu Glu Tyr Thr
805 810 815

Pro Ser Ala Arg Ile Thr Pro Leu Lys Ala Cys Ala His Pro Phe Phe
820 825 830

Asp Glu Leu Arg Met Glu Gly Asn His Thr Leu Pro Asn Gly Arg Asp
835 840 845

Met Pro Pro Leu Phe Asn Phe Thr Glu His Glu Leu Ser Ile Gln Pro
850 855 860

Ser Leu Val Pro Gln Leu Leu Pro Lys His Leu Gln Asn Ala Ser Gly
865 870 875 880

Pro Gly Gly Asn Arg Pro Ser Ala Gly Gly Ala Ala Ser Ile Ala Ala
885 890 895

Ser Gly Ser Thr Ser Val Ser Ser Thr Gly Ser Gly Ala Ser Val Glu
900 905 910

Gly Ser Ala Gln Pro Gln Ser Gln Gly Thr Ala Ala Ala Ala Gly Ser
915 920 925

Gly Ser Gly Gly Ala Thr Ala Gly Thr Gly Gly Ala Ser Ala Gly Gly
930 935 940

Pro Gly Ser Gly Asn Asn Ser Ser Ser Gly Gly Ala Ser Gly Ala Pro
945 950 955 960

Ser Ala Val Ala Ala Gly Gly Ala Asn Ala Ala Val Ala Gly Gly Ala
965 970 975

Gly Gly Gly Gly Gly Ala Gly Ala Ala Thr Ala Ala Ala Thr Ala Thr
980 985 990

Gly Ala Ile Gly Ala Thr Asn Ala Gly Gly Ala Asn Val Thr Asp Ser
995 1000 1005

<210> 256

<211> 1389

<212> DNA

<213> Homo sapiens

Sequence listing as filed1.txt

<400> 256
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acctcctttg cggagagctg caagccggtg cagcagcctt cagcttttgg cagcatgaaa 120
gttagcagag acaaggacgg cagcaagggtg acaacagtgg tggcaactcc tgggcaggggt 180
ccagacaggc cacaagaagt cagctataca gacactaaag tgattggaaa tggatcattt 240
gggtgtggtat atcaagccaa actttgtgat tcaggagaac tggtcgccat caagaaagta 300
ttgcaggaca agagatttta gaatcgagag ctccagatca tgagaaagct agatcactgt 360
aacatagtcc gattgcgta tttcttctac tccagtgggtg agaagaaaga tgaggtctat 420
cttaatctgg tgctggacta tgttccggaa acagtataca gagttgccag aactatagtt 480
cgagccaaac agacgctccc tgtgatttat gtcaagttgt atatgtatca gctgttccga 540
agtttagcct atatccattc ctttggaaac tgccatcggg atattaaacc gcagaacctc 600
ttgttggatc ctgatactgc tgtattaaaa ctctgtgact ttggaagtgc aaagcagctg 660
gtccgaggag aacccaatgt ttcgtatata tgttctcggg actatagggc accagagttg 720
atctttggag cactgatta tacctctagt atagatgtat ggtctgctgg ctgtgtgttg 780
gctgagctgt tactaggaca accaatatct ccaggggata gtggtgtgga tcagttggtg 840
gaaataatca aggtcctggg aactccaaca agggagcaaa tcagagaaat gaacccaaac 900
tacacagaat ttaaattccc tcaaattaag gcacatcctt ggactaagggt cttccgaccc 960
cgaactccac cggaggcaat tgcaactgtg agccgtctgc tggagtatac accaactgcc 1020
cgactaacac cactggaagc ttgtgcacat tcattttttg atgaattacg ggacccaaat 1080
gtcaaacatc caaatgggcy agacacacct gcactcttca acttcaccac tcaagaactg 1140
tcaagtaatc cacctctggc taccatcctt attcctcctc atgctcggat tcaagcagct 1200
gcttcaaccc ccacaaatgc cacagcagcy tcagatgcta atactggaga ccgtggacag 1260
accaataatg ctgcttctgc atcagcttcc aactccacct gaacagtccc gacgagccag 1320
ctgcacagga aaaaccacca gttacttgag tgtcactcag caacactggg cacgtttgga 1380
aagaatatt 1389

<210> 257

<211> 420

<212> PRT

<213> Homo sapiens

Sequence listing as filed1.txt

<400> 257

Met Ser Gly Arg Pro Arg Thr Thr Ser Phe Ala Glu Ser Cys Lys Pro
1 5 10 15

Val Gln Gln Pro Ser Ala Phe Gly Ser Met Lys Val Ser Arg Asp Lys
20 25 30

Asp Gly Ser Lys Val Thr Thr Val Val Ala Thr Pro Gly Gln Gly Pro
35 40 45

Asp Arg Pro Gln Glu Val Ser Tyr Thr Asp Thr Lys Val Ile Gly Asn
50 55 60

Gly Ser Phe Gly Val Val Tyr Gln Ala Lys Leu Cys Asp Ser Gly Glu
65 70 75 80

Leu Val Ala Ile Lys Lys Val Leu Gln Asp Lys Arg Phe Lys Asn Arg
85 90 95

Glu Leu Gln Ile Met Arg Lys Leu Asp His Cys Asn Ile Val Arg Leu
100 105 110

Arg Tyr Phe Phe Tyr Ser Ser Gly Glu Lys Lys Asp Glu Val Tyr Leu
115 120 125

Asn Leu Val Leu Asp Tyr Val Pro Glu Thr Val Tyr Arg Val Ala Arg
130 135 140

His Tyr Ser Arg Ala Lys Gln Thr Leu Pro Val Ile Tyr Val Lys Leu
145 150 155 160

Tyr Met Tyr Gln Leu Phe Arg Ser Leu Ala Tyr Ile His Ser Phe Gly
165 170 175

Ile Cys His Arg Asp Ile Lys Pro Gln Asn Leu Leu Leu Asp Pro Asp
180 185 190

Thr Ala Val Leu Lys Leu Cys Asp Phe Gly Ser Ala Lys Gln Leu Val
195 200 205

Arg Gly Glu Pro Asn Val Ser Tyr Ile Cys Ser Arg Tyr Tyr Arg Ala
210 215 220

Pro Glu Leu Ile Phe Gly Ala Thr Asp Tyr Thr Ser Ser Ile Asp Val
225 230 235 240

Trp Ser Ala Gly Cys Val Leu Ala Glu Leu Leu Leu Gly Gln Pro Ile
Page 350

Sequence listing as filed1.txt

245

250

255

Phe Pro Gly Asp Ser Gly Val Asp Gln Leu Val Glu Ile Ile Lys Val
260 265 270

Leu Gly Thr Pro Thr Arg Glu Gln Ile Arg Glu Met Asn Pro Asn Tyr
275 280 285

Thr Glu Phe Lys Phe Pro Gln Ile Lys Ala His Pro Trp Thr Lys Val
290 295 300

Phe Arg Pro Arg Thr Pro Pro Glu Ala Ile Ala Leu Cys Ser Arg Leu
305 310 315 320

Leu Glu Tyr Thr Pro Thr Ala Arg Leu Thr Pro Leu Glu Ala Cys Ala
325 330 335

His Ser Phe Phe Asp Glu Leu Arg Asp Pro Asn Val Lys His Pro Asn
340 345 350

Gly Arg Asp Thr Pro Ala Leu Phe Asn Phe Thr Thr Gln Glu Leu Ser
355 360 365

Ser Asn Pro Pro Leu Ala Thr Ile Leu Ile Pro Pro His Ala Arg Ile
370 375 380

Gln Ala Ala Ala Ser Thr Pro Thr Asn Ala Thr Ala Ala Ser Asp Ala
385 390 395 400

Asn Thr Gly Asp Arg Gly Gln Thr Asn Asn Ala Ala Ser Ala Ser Ala
405 410 415

Ser Asn Ser Thr
420

<210> 258

<211> 3454

<212> DNA

<213> Drosophila melanogaster

<400> 258

cacaaacaac acgctcgtgc gtgcgattta aatatataga tgtttcaaaa gtcaacctct 60

ctgttcgcaa ttgtgtgcat tttcgtttgt ctagtgcaaa aagttggata atcacaggcg 120

gcaaataaaa tagtaacgaa tcgagttcaa gaagaagaag aagagaagag gaagcagagg 180

Sequence listing as filed1.txt

cagcagcgcc ggcatttgtc cgtgtgttgt tgttgttgtt tgtgcgcggc tgtaacttta	240
accctcgaac gccataagat taaaaaacca agtataacaa taagttataa aatcaattaa	300
acaaaagccg ctgcgatatg acaacgagga aaaagaagcg cgacggcggc ggcagcggcg	360
gcggattcat caagaaagtt tcgtcactct tcaatctgga ttcgggtgaat ggcgatgata	420
gctggttata cgaggacatt cagctggagc gcggcaactc cggattgggc ttttccattg	480
ccggcgggtac ggataatccg cacatcggca ccgacacctc catctacatc accaagctca	540
tttccgggtgg agcagctgcc gccgatggac gtctgagcat caacgatatc atcgtatcgg	600
tgaacgatgt gtccgtggtg gatgtgccac atgcctccgc cgtggatgcc ctcaagaagg	660
cgggcaatgt tgtaagctg catgtgaagc gaaaacgtgg aacggccacc accccggcag	720
cgggatcggc ggcaggagat gctcgggata gtgcggccag cggaccgaag gtcatcga	780
tcgatctggt caagggcggc aagggaactg gcttctcaat tgccggcggc attggcaacc	840
agcacatccc cggcgacaat ggcattctatg tgaccaagtt gatggacggc ggagcagcgc	900
aggtggacgg acgtctctcc atcggagata agctgattgc agtgcgcacc aacgggagcg	960
agaagaacct ggagaacgta acgcacgaac tggcgggtggc cacgttgaaa tcgatcaccg	1020
acaaggtgac gctgatcatt ggaaagacac agcatctgac caccagtgcg tccggcggcg	1080
gaggaggagg cttttcatcc ggacaacaat tgtcgcagtc ccaatcgag ttggccacca	1140
gccagagcca aagtcagggtg catcagcagc agcatgcgac gccgatggtc aattcgagtc	1200
cgacaggtgc gctaaatagt atgggacaga cggttgtcga ttcacatca ataccacaag	1260
cagccgcagc agtagcagca gcagcaaatg catctgcatc tgcatcagtc attgcaagca	1320
acaacacaat cagcaacacc acagtcacca cagtcacggc cacggccaca gccagcaaca	1380
gtagcagcaa gttgccgccg tcgcttggtg ctaacagcag cattagcatt agcaatagca	1440
atagcaatag caacagcaat aatatcaaca acattaatag catcaacaac aacaacagta	1500
gcagcagcag cagcagcgca actgttgagc cagcaacacc aacagcagca tcagcagcag	1560
cagcagcagc atcatctcca cccgccaaact ctttctataa caatgcttcc atgcccggcc	1620
tgcctgtcga atccaatcaa acaaacaacc gatcccaatc accccagccg cgccagcccg	1680
ggtcgcgata cgcctctaca aatgtcctag ccgccgttcc accaggaact ccacgcgtg	1740
tcagcaccga ggatataacc agagaaccgc gcaccatcac catccagaag ggaccgcagg	1800
gcctgggctt caatatcggt ggcggcgagg atggccaggg tatctatgtg tccttcatcc	1860
tggccggcgg cccagcggtat ctgggtcgg agttgaagcg tggcgaccag ctgctcagcg	1920
tgaacaatgt caatctcacg cagccacccc acgaagaggc agcccaggcg ctcaagactt	1980
ctggcgggtgt ggtgaccctg ttggcgcagt accgcccaga ggagtacaat cgcttcgagg	2040

Sequence listing as filed1.txt

cacgcattca agagttgaaa caacaggctg ccctcgggtgc cggcggatcg ggaacgctgc	2100
tgcgaccac gcaaaagcga tcgctgtatg tgcgcgccct gtttgactac gatccgaatc	2160
gggatgatgg attgccctcg cgaggattgc cctttaagca cggcgatatc ctgcacgtga	2220
ccaatgcctc cgacgatgaa tgggtggcagg cacgacgagt tctcggcgac aacgaggacg	2280
agcaaatcgg tattgtacca tcgaaaaggc gttgggagcg caaaatgcga gctagggacc	2340
gcagcgtaa gttccagga catgcggcag ctaataataa tctggataag caatcgacat	2400
tggatcgaaa gaaaaagaat ttcacattct cgcgcaaatt tccgtttatg aagagtcgcg	2460
atgagaagaa tgaagatggc agcgaccaag agcccaatgg agttgtgagc agcaccagcg	2520
agattgacat caataatgtc aacaacaacc agtcaaatga accgcaacct tccgaggaga	2580
acgtgttgtc ctacgaggcc gtacagcgtt tgtccatcaa ctacacgcgc ccggtgatta	2640
ttctgggacc cctgaaggat cgcatcaacg atgaccttat atcagagtat cccgacaagt	2700
tcggctcttg tgtgccacac accacccgac ccaagcgaga gtacgaggtg gatggtaggg	2760
actaccactt tgtatcctct cgcgagcaaa tggaacggga tattcagaat catctgttca	2820
tcgaggcggg acagtataac gacaatctgt acggcacatc ggtggccagc gtgcgcgaag	2880
tggccgagaa gggtaaaccac tgcaccttgg acgtgtccgg gaacgccatc aagcgactcc	2940
aagttgcca gctgtatccc gtcgccgtgt tcatcaagcc caagtcggtg gattcagtga	3000
tggaaatgaa tcgtcgcgatg acggaggagc aggccaagaa gacttacgag cgggcgatta	3060
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gatgtcgacc agtctcgaga acaacaatag gagcaacagc agcagcaaca aatcagcagc	3300
cgcagcagaa gacgccgcac tgatgatgca tcacagtaac aacagatact aatacaacta	3360
caacaacaac aagaacaaca acaacaacag caaccacagc agcagccaca gcgacaacaa	3420
caaaaacaac aacactgaca acgacaggaa acgg	3454

<210> 259

<211> 960

<212> PRT

<213> Drosophila melanogaster

<400> 259

Met	Thr	Thr	Arg	Lys	Lys	Lys	Arg	Asp	Gly	Gly	Gly	Ser	Gly	Gly	Gly
1				5					10					15	

Sequence listing as filed1.txt

Phe Ile Lys Lys Val Ser Ser Leu Phe Asn Leu Asp Ser Val Asn Gly
 20 25 30
 Asp Asp Ser Trp Leu Tyr Glu Asp Ile Gln Leu Glu Arg Gly Asn Ser
 35 40 45
 Gly Leu Gly Phe Ser Ile Ala Gly Gly Thr Asp Asn Pro His Ile Gly
 50 55 60
 Thr Asp Thr Ser Ile Tyr Ile Thr Lys Leu Ile Ser Gly Gly Ala Ala
 65 70 75 80
 Ala Ala Asp Gly Arg Leu Ser Ile Asn Asp Ile Ile Val Ser Val Asn
 85 90 95
 Asp Val Ser Val Val Asp Val Pro His Ala Ser Ala Val Asp Ala Leu
 100 105 110
 Lys Lys Ala Gly Asn Val Val Lys Leu His Val Lys Arg Lys Arg Gly
 115 120 125
 Thr Ala Thr Thr Pro Ala Ala Gly Ser Ala Ala Gly Asp Ala Arg Asp
 130 135 140
 Ser Ala Ala Ser Gly Pro Lys Val Ile Glu Ile Asp Leu Val Lys Gly
 145 150 155 160
 Gly Lys Gly Leu Gly Phe Ser Ile Ala Gly Gly Ile Gly Asn Gln His
 165 170 175
 Ile Pro Gly Asp Asn Gly Ile Tyr Val Thr Lys Leu Thr Asp Gly Gly
 180 185 190
 Arg Ala Gln Val Asp Gly Arg Leu Ser Ile Gly Asp Lys Leu Ile Ala
 195 200 205
 Val Arg Thr Asn Gly Ser Glu Lys Asn Leu Glu Asn Val Thr His Glu
 210 215 220
 Leu Ala Val Ala Thr Leu Lys Ser Ile Thr Asp Lys Val Thr Leu Ile
 225 230 235 240
 Ile Gly Lys Thr Gln His Leu Thr Thr Ser Ala Ser Gly Gly Gly Gly
 245 250 255
 Gly Gly Leu Ser Ser Gly Gln Gln Leu Ser Gln Ser Gln Ser Gln Leu

Sequence listing as filed1.txt

260

265

270

Ala Thr Ser Gln Ser Gln Ser Gln Val His Gln Gln Gln His Ala Thr
275 280 285

Pro Met Val Asn Ser Gln Ser Thr Gly Ala Leu Asn Ser Met Gly Gln
290 295 300

Thr Val Val Asp Ser Pro Ser Ile Pro Gln Ala Ala Ala Ala Val Ala
305 310 315 320

Ala Ala Ala Asn Ala Ser Ala Ser Ala Ser Val Ile Ala Ser Asn Asn
325 330 335

Thr Ile Ser Asn Thr Thr Val Thr Thr Val Thr Ala Thr Ala Thr Ala
340 345 350

Ser Asn Asp Ser Ser Lys Leu Pro Pro Ser Leu Gly Ala Asn Ser Ser
355 360 365

Ile Ser Ile Ser Asn Ser Asn Ser Asn Ser Asn Ser Asn Asn Ile Asn
370 375 380

Asn Ile Asn Ser Ile Asn Asn Asn Asn Ser Ser Ser Ser Ser Thr Thr
385 390 395 400

Ala Thr Val Ala Ala Ala Thr Pro Thr Ala Ala Ser Ala Ala Ala Ala
405 410 415

Ala Ala Ser Ser Pro Pro Ala Asn Ser Phe Tyr Asn Asn Ala Ser Met
420 425 430

Pro Ala Leu Pro Val Glu Ser Asn Gln Thr Asn Asn Arg Ser Gln Ser
435 440 445

Pro Gln Pro Arg Gln Pro Gly Ser Arg Tyr Ala Ser Thr Asn Val Leu
450 455 460

Ala Ala Val Pro Pro Gly Thr Pro Arg Ala Val Ser Thr Glu Asp Ile
465 470 475 480

Thr Arg Glu Pro Arg Thr Ile Thr Ile Gln Lys Gly Pro Gln Gly Leu
485 490 495

Gly Phe Asn Ile Val Gly Gly Glu Asp Gly Gln Gly Ile Tyr Val Ser
500 505 510

Sequence listing as filed1.txt

Phe Ile Leu Ala Gly Gly Pro Ala Asp Leu Gly Ser Glu Leu Lys Arg
515 520 525

Gly Asp Gln Leu Leu Ser Val Asn Asn Val Asn Leu Thr His Ala Thr
530 535 540

His Glu Glu Ala Ala Gln Ala Leu Lys Thr Ser Gly Gly Val Val Thr
545 550 555 560

Leu Leu Ala Gln Tyr Arg Pro Glu Glu Tyr Asn Arg Phe Glu Ala Arg
565 570 575

Ile Gln Glu Leu Lys Gln Gln Ala Ala Leu Gly Ala Gly Gly Ser Gly
580 585 590

Thr Leu Leu Arg Thr Thr Gln Lys Arg Ser Leu Tyr Val Arg Ala Leu
595 600 605

Phe Asp Tyr Asp Pro Asn Arg Asp Asp Gly Leu Pro Ser Arg Gly Leu
610 615 620

Pro Phe Lys His Gly Asp Ile Leu His Val Thr Asn Ala Ser Asp Asp
625 630 635 640

Glu Trp Trp Gln Ala Arg Arg Val Leu Gly Asp Asn Glu Asp Glu Gln
645 650 655

Ile Gly Ile Val Pro Ser Lys Arg Arg Trp Glu Arg Lys Met Arg Ala
660 665 670

Arg Asp Arg Ser Val Lys Phe Gln Gly His Ala Ala Ala Asn Asn Asn
675 680 685

Leu Asp Lys Gln Ser Thr Leu Asp Arg Lys Lys Lys Asn Phe Thr Phe
690 695 700

Ser Arg Lys Phe Pro Phe Met Lys Ser Arg Asp Glu Lys Asn Glu Asp
705 710 715 720

Gly Ser Asp Gln Glu Pro Asn Gly Val Val Ser Ser Thr Ser Glu Ile
725 730 735

Asp Ile Asn Asn Val Asn Asn Asn Gln Ser Asn Glu Pro Gln Pro Ser
740 745 750

Glu Glu Asn Val Leu Ser Tyr Glu Ala Val Gln Arg Leu Ser Ile Asn
755 760 765

Sequence listing as filed1.txt

Tyr Thr Arg Pro Val Ile Ile Leu Gly Pro Leu Lys Asp Arg Ile Asn
770 775 780

Asp Asp Leu Ile Ser Glu Tyr Pro Asp Lys Phe Gly Ser Cys Val Pro
785 790 795 800

His Thr Thr Arg Pro Lys Arg Glu Tyr Glu Val Asp Gly Arg Asp Tyr
805 810 815

His Phe Val Ser Ser Arg Glu Gln Met Glu Arg Asp Ile Gln Asn His
820 825 830

Leu Phe Ile Glu Ala Gly Gln Tyr Asn Asp Asn Leu Tyr Gly Thr Ser
835 840 845

Val Ala Ser Val Arg Glu Val Ala Glu Lys Gly Lys His Cys Ile Leu
850 855 860

Asp Val Ser Gly Asn Ala Ile Lys Arg Leu Gln Val Ala Gln Leu Tyr
865 870 875 880

Pro Val Ala Val Phe Ile Lys Pro Lys Ser Val Asp Ser Val Met Glu
885 890 895

Met Asn Arg Arg Met Thr Glu Glu Gln Ala Lys Lys Thr Tyr Glu Arg
900 905 910

Ala Ile Lys Met Glu Gln Glu Phe Gly Glu Tyr Phe Thr Gly Val Val
915 920 925

Gln Gly Asp Thr Ile Glu Glu Ile Tyr Ser Lys Val Lys Ser Met Ile
930 935 940

Trp Ser Gln Ser Gly Pro Thr Ile Trp Val Pro Ser Lys Glu Ser Leu
945 950 955 960

<210> 260

<211> 3263

<212> DNA

<213> Drosophila melanogaster

<400> 260

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ttgtttgttt attttgtttt gtgcaatgga aatgtgaaca caaatgtttc aaaagtcaac 120

Sequence listing as filed1.txt

ctctctgttc gcaattgtgt gcattttcgt ttgtctagtg caaaaagttg gataacacag	180
gcggcaaata aaatagtaac gaatcgagtt caagaagaag aagaagagaa gaggaagcag	240
aggcagcagc gccggcattt gtccgtgtgt tgttgttgtt gtttgtgctg ggctgtaact	300
ttaaccctcg aacgccataa gattaataaaa ccaactataa caataagtta taaaatcaat	360
taaacaaaag ccgctgcgat atgacaacga ggaaaaagaa gcgcgacggc ggcggcagcg	420
gcggcggatt catcaagaaa gtttcgtcac tcttcaatct ggattcgggtg aatggcgatg	480
atagctgggt atacgaggac attcagctgg agcgcggcaa ctccggattg ggcttttcca	540
ttgccggcgg tacggataat ccgcacatcg gcaccgacac ctccatctac atcaccaagc	600
tcatttccgg tggagcagct gccgccgatg gacgtctgag catcaacgat atcatcgtat	660
cggatgaacga tgtgtccgtg gtggatgtgc cacatgcctc cgccgtggat gccctcaaga	720
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cagcgggatc ggcggcagga gatgctcggg atagtgcggc cagcggaccg aaggatcatc	840
aaatcgatct ggtcaagggc ggcaagggac tgggcttctc aattgccggc ggcattggca	900
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gcaacaacac aatcagcaac accacagtca ccacagtcac ggccacggcc acagccagca	1440
acgatagcag caagttgccg ccgtcgttg gcgctaacag cagcattagc attagcaata	1500
gcaatagcaa tagcaacagc aataatatca acaacattaa tagcatcaac aacaacaaca	1560
gtagcagcag cagcacgacg gcaactgttg cagcagcaac accaacagca gcatcagcag	1620
cagcagcagc agcatcatct ccacccgcca actccttcta taacaatgct tccatgccc	1680
ccctgcctgt cgaatccaat caaacaaca accgatcca atcacccag ccgcgccagc	1740
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ctgtcagcac cgaggatata accagagaac cacgcacat caccatccag aagggaccgc	1860
agggcctggg cttcaatatc gttggcggcg aggatggcca gggatatctat gtgtccttca	1920
tcctggccgg cggcccagcg gatctcgggt cggagttgaa gcgtggcgac cagctgctca	1980

Sequence listing as filed1.txt

gcgtgaacaa tgtcaatctc acgcacgcca cccacgaaga ggcagcccag gcgctcaaga 2040
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aggcacgcat tcaagagttg aaacaacagg ctgccctcgg tgccggcgga tcgggaacgc 2160
tgctgcgcac cacgcaaaaag cgatcgctgt atgtgcgcgc cctgtttgac tacgatccga 2220
atcgggatga tggattgccc tcgcgaggat tgccctttaa gcacggcgat atcctgcacg 2280
tgaccaatgc ctccgacgat gaatggtggc aggcacgacg agttctcggc gacaacgagg 2340
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accgcagcgt taagtccag ggacatgcgg cagctaataa taatctggat aagcaatcga 2460
cattggatcg aaagaaaaag aatttcacat tctcgcgcaa atttccgttt atgaagagtc 2520
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gcgagattga catcaataat gtcaacaaca accagtcaaa tgaaccgcaa ccttccgagg 2640
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taccttccaa ggaatctcta tga 3263

<210> 261

<211> 960

<212> PRT

<213> Drosophila melanogaster

<400> 261

Met Thr Thr Arg Lys Lys Lys Arg Asp Gly Gly Gly Ser Gly Gly Gly
1 5 10 15

Phe Ile Lys Lys Val Ser Ser Leu Phe Asn Leu Asp Ser Val Asn Gly
20 25 30

Sequence listing as filed1.txt

Asp Asp Ser Trp Leu Tyr Glu Asp Ile Gln Leu Glu Arg Gly Asn Ser
35 40 45

Gly Leu Gly Phe Ser Ile Ala Gly Gly Thr Asp Asn Pro His Ile Gly
50 55 60

Thr Asp Thr Ser Ile Tyr Ile Thr Lys Leu Ile Ser Gly Gly Ala Ala
65 70 75 80

Ala Ala Asp Gly Arg Leu Ser Ile Asn Asp Ile Ile Val Ser Val Asn
85 90 95

Asp Val Ser Val Val Asp Val Pro His Ala Ser Ala Val Asp Ala Leu
100 105 110

Lys Lys Ala Gly Asn Val Val Lys Leu His Val Lys Arg Lys Arg Gly
115 120 125

Thr Ala Thr Thr Pro Ala Ala Gly Ser Ala Ala Gly Asp Ala Arg Asp
130 135 140

Ser Ala Ala Ser Gly Pro Lys Val Ile Glu Ile Asp Leu Val Lys Gly
145 150 155 160

Gly Lys Gly Leu Gly Phe Ser Ile Ala Gly Gly Ile Gly Asn Gln His
165 170 175

Ile Pro Gly Asp Asn Gly Ile Tyr Val Thr Lys Leu Thr Asp Gly Gly
180 185 190

Arg Ala Gln Val Asp Gly Arg Leu Ser Ile Gly Asp Lys Leu Ile Ala
195 200 205

Val Arg Thr Asn Gly Ser Glu Lys Asn Leu Glu Asn Val Thr His Glu
210 215 220

Leu Ala Val Ala Thr Leu Lys Ser Ile Thr Asp Lys Val Thr Leu Ile
225 230 235 240

Ile Gly Lys Thr Gln His Leu Thr Thr Ser Ala Ser Gly Gly Gly Gly
245 250 255

Gly Gly Leu Ser Ser Gly Gln Gln Leu Ser Gln Ser Gln Ser Gln Leu
260 265 270

Sequence listing as filed1.txt

275

280

285

Pro Met Val Asn Ser Gln Ser Thr Gly Ala Leu Asn Ser Met Gly Gln
 290 295 300

Thr Val Val Asp Ser Pro Ser Ile Pro Gln Ala Ala Ala Ala Val Ala
 305 310 315 320

Ala Ala Ala Asn Ala Ser Ala Ser Ala Ser Val Ile Ala Ser Asn Asn
 325 330 335

Thr Ile Ser Asn Thr Thr Val Thr Thr Val Thr Ala Thr Ala Thr Ala
 340 345 350

Ser Asn Asp Ser Ser Lys Leu Pro Pro Ser Leu Gly Ala Asn Ser Ser
 355 360 365

Ile Ser Ile Ser Asn Ser Asn Ser Asn Ser Asn Ser Asn Asn Ile Asn
 370 375 380

Asn Ile Asn Ser Ile Asn Asn Asn Asn Ser Ser Ser Ser Ser Thr Thr
 385 390 395 400

Ala Thr Val Ala Ala Ala Thr Pro Thr Ala Ala Ser Ala Ala Ala Ala
 405 410 415

Ala Ala Ser Ser Pro Pro Ala Asn Ser Phe Tyr Asn Asn Ala Ser Met
 420 425 430

Pro Ala Leu Pro Val Glu Ser Asn Gln Thr Asn Asn Arg Ser Gln Ser
 435 440 445

Pro Gln Pro Arg Gln Pro Gly Ser Arg Tyr Ala Ser Thr Asn Val Leu
 450 455 460

Ala Ala Val Pro Pro Gly Thr Pro Arg Ala Val Ser Thr Glu Asp Ile
 465 470 475 480

Thr Arg Glu Pro Arg Thr Ile Thr Ile Gln Lys Gly Pro Gln Gly Leu
 485 490 495

Gly Phe Asn Ile Val Gly Gly Glu Asp Gly Gln Gly Ile Tyr Val Ser
 500 505 510

Phe Ile Leu Ala Gly Gly Pro Ala Asp Leu Gly Ser Glu Leu Lys Arg
 515 520 525

Sequence listing as filed1.txt

Gly Asp Gln Leu Leu Ser Val Asn Asn Val Asn Leu Thr His Ala Thr
530 535 540

His Glu Glu Ala Ala Gln Ala Leu Lys Thr Ser Gly Gly Val Val Thr
545 550 555 560

Leu Leu Ala Gln Tyr Arg Pro Glu Glu Tyr Asn Arg Phe Glu Ala Arg
565 570 575

Ile Gln Glu Leu Lys Gln Gln Ala Ala Leu Gly Ala Gly Gly Ser Gly
580 585 590

Thr Leu Leu Arg Thr Thr Gln Lys Arg Ser Leu Tyr Val Arg Ala Leu
595 600 605

Phe Asp Tyr Asp Pro Asn Arg Asp Asp Gly Leu Pro Ser Arg Gly Leu
610 615 620

Pro Phe Lys His Gly Asp Ile Leu His Val Thr Asn Ala Ser Asp Asp
625 630 635 640

Glu Trp Trp Gln Ala Arg Arg Val Leu Gly Asp Asn Glu Asp Glu Gln
645 650 655

Ile Gly Ile Val Pro Ser Lys Arg Arg Trp Glu Arg Lys Met Arg Ala
660 665 670

Arg Asp Arg Ser Val Lys Phe Gln Gly His Ala Ala Ala Asn Asn Asn
675 680 685

Leu Asp Lys Gln Ser Thr Leu Asp Arg Lys Lys Lys Asn Phe Thr Phe
690 695 700

Ser Arg Lys Phe Pro Phe Met Lys Ser Arg Asp Glu Lys Asn Glu Asp
705 710 715 720

Gly Ser Asp Gln Glu Pro Asn Gly Val Val Ser Ser Thr Ser Glu Ile
725 730 735

Asp Ile Asn Asn Val Asn Asn Asn Gln Ser Asn Glu Pro Gln Pro Ser
740 745 750

Glu Glu Asn Val Leu Ser Tyr Glu Ala Val Gln Arg Leu Ser Ile Asn
755 760 765

Tyr Thr Arg Pro Val Ile Ile Leu Gly Pro Leu Lys Asp Arg Ile Asn
770 775 780

Sequence listing as filed1.txt

Asp Asp Leu Ile Ser Glu Tyr Pro Asp Lys Phe Gly Ser Cys Val Pro
785 790 795 800

His Thr Thr Arg Pro Lys Arg Glu Tyr Glu Val Asp Gly Arg Asp Tyr
805 810 815

His Phe Val Ser Ser Arg Glu Gln Met Glu Arg Asp Ile Gln Asn His
820 825 830

Leu Phe Ile Glu Ala Gly Gln Tyr Asn Asp Asn Leu Tyr Gly Thr Ser
835 840 845

Val Ala Ser Val Arg Glu Val Ala Glu Lys Gly Lys His Cys Ile Leu
850 855 860

Asp Val Ser Gly Asn Ala Ile Lys Arg Leu Gln Val Ala Gln Leu Tyr
865 870 875 880

Pro Val Ala Val Phe Ile Lys Pro Lys Ser Val Asp Ser Val Met Glu
885 890 895

Met Asn Arg Arg Met Thr Glu Glu Gln Ala Lys Lys Thr Tyr Glu Arg
900 905 910

Ala Ile Lys Met Glu Gln Glu Phe Gly Glu Tyr Phe Thr Gly Val Val
915 920 925

Gln Gly Asp Thr Ile Glu Glu Ile Tyr Ser Lys Val Lys Ser Met Ile
930 935 940

Trp Ser Gln Ser Gly Pro Thr Ile Trp Val Pro Ser Lys Glu Ser Leu
945 950 955 960

<210> 262

<211> 2486

<212> DNA

<213> Homo sapiens

<400> 262
gggaattctg gcctgggatt cagtattgct ggggggacag ataatcccca cattggagat 60
gaccctggca tatttattac gaagattata ccaggagggtg ctgcagcaga ggatggcaga 120
ctcagggtca atgattgtat cttgcgggtg aatgagggtg atgtgtcaga ggtttccac 180
agtaaagcgg tggaagccct gaaggaagca gggctctatcg ttcggctgta tgtgcgtaga 240

Sequence listing as filed1.txt

agacgaccta ttttggagac cgttgtggaa atcaaactgt tcaaaggccc taaaggttta	300
ggcttcagta ttgcaggagg tgtggggaac caacacattc ctggagacaa cagcatttat	360
gtaactaaaa ttatagatgg aggagctgca caaaaagatg gaaggttgca agtaggagat	420
agactactaa tggtaaaca ctacagttta gaagaagtaa cacacgaaga ggcagtagca	480
atattaaaga acacatcaga ggtagtttat ttaaaagttg gcaaaccac taccatttat	540
atgactgata cttatggtcc acctgatatt actcactctt attctccacc aatggaaaac	600
catctactct ctggcaacaa tggcacttta gaatataaaa cctccctgcc acccatctct	660
ccaggaaggt actcaccaat tccaaagcac atgcttgttg acgacgacta caccaggcct	720
ccggaacctg ttacagcac tgtgaacaaa ctatgtgata agcctgcttc tcccaggcac	780
tattcccctg ttgagtgtga caaaagcttc ctctctcag ctccctattc ccactaccac	840
ctaggcctgc tacctgactc tgagatgacc agtcattccc aacatagcac cgcaactcgt	900
cagccttcaa tgactctcca acgggccgtc tccctggaag gagagcctcg caaggtagtc	960
ctgcacaaag gctccactgg cctgggcttc aacattgtcg gtggggaaga tggagaaggt	1020
atttttgtgt ccttcattct ggctggtgga ccagcagacc taagtgggga gctccagaga	1080
ggagaccaga tcctatcggg gaatggcatt gacctccgtg gtgcatccca cgagcaggca	1140
gctgctgcac taaagggggc tggacagaca gtgacgatta tagcacaata tcaacctgaa	1200
gattacgctc gatttgaggc caaaatccat gacctacgag agcagatgat gaaccacagc	1260
atgagctccg ggtccggatc cctgcgaacc aatcagaaac gctccctcta cgtcagagcc	1320
atgttcgact acgacaagag caaggacagt gggctgccaa gtcaaggact tagttttaaa	1380
tatggagata ttctccacgt tatcaatgcc tctgatgatg agtgggtggca agccaggaga	1440
gtcatgctgg agggagacag tgaggagatg ggggtcatcc ccagcaaaag gaggggtggaa	1500
agaaaggaac gtgcccgatt gaagacagtg aagtttaatg ccaaacctgg agtgattgat	1560
tcgaaagggc cattcaatga caagcgtaaa aagagcttca tcttttcacg aaaattccca	1620
ttctacaaga acaaggagca gagtgagcag gaaaccagtg atcctgaacg tggacaagaa	1680
gacctcattc tttcctatga gcctgttaca aggcaggaaa taaactacac ccggccggtg	1740
attatcctgg ggcccatgaa ggatcggatc aatgacgact tgatatctga attccctgat	1800
aaatttggct cctgtgtgcc tcatactacg aggccaaagc gagactacga ggtggatggc	1860
agagactatc actttgtcat ttccagagaa caaatggaga aagatatcca agagcacaag	1920
tttatagaag ccggccagta caatgacaat ttatatggaa ccagtgtgca gtctgtgaga	1980
ttttagtagc aaagaggcaa aactgtata cttgatgtat caggaaatgc tatcaagcgg	2040
ttacaagttg cccagctcta tcccattgcc atcttcataa aaccagggtc tctggaacct	2100

Sequence listing as filed1.txt

cttatggaga tgaataagcg tctaacagag gaacaagcca agaaaaccta tgatcgagca 2160
 attaagctag aacaagaatt tggagaatat ttacagcta ttgtccaagg agatacttta 2220
 gaagatatat ataaccaatg caagcttggt attgaagagc aatctgggcc ttcatctgg 2280
 attccctcaa aggaaaagtt ataaattagc tactgcgct ctgacaacga cagaagagca 2340
 tttagaagaa caaatatat ataacatact acttggaggc ttttatgttt ttgttgcat 2400
 tatgtttttg cagtcaatgt gaattcttac gaatgtacaa cacaaactgt atgaagccat 2460
 gaaggaaaca gaggggccaagggtg 2486

<210> 263

<211> 624

<212> PRT

<213> Homo sapiens

<400> 263

Met Val Asn Asn Tyr Ser Leu Glu Glu Val Thr His Glu Glu Ala Val
 1 5 10 15
 Ala Ile Leu Lys Asn Thr Ser Glu Val Val Tyr Leu Lys Val Gly Lys
 20 25 30
 Pro Thr Thr Ile Tyr Met Thr Asp Pro Tyr Gly Pro Pro Asp Ile Thr
 35 40 45
 His Ser Tyr Ser Pro Pro Met Glu Asn His Leu Leu Ser Gly Asn Asn
 50 55 60
 Gly Thr Leu Glu Tyr Lys Thr Ser Leu Pro Pro Ile Ser Pro Gly Arg
 65 70 75 80
 Tyr Ser Pro Ile Pro Lys His Met Leu Val Asp Asp Asp Tyr Thr Arg
 85 90 95
 Pro Pro Glu Pro Val Tyr Ser Thr Val Asn Lys Leu Cys Asp Lys Pro
 100 105 110
 Ala Ser Pro Arg His Tyr Ser Pro Val Glu Cys Asp Lys Ser Phe Leu
 115 120 125
 Leu Ser Ala Pro Tyr Ser His Tyr His Leu Gly Leu Leu Pro Asp Ser
 130 135 140

Sequence listing as filed1.txt

Glu Met Thr Ser His Ser Gln His Ser Thr Ala Thr Arg Gln Pro Ser
145 150 155 160

Met Thr Leu Gln Arg Ala Val Ser Leu Glu Gly Glu Pro Arg Lys Val
165 170 175

Val Leu His Lys Gly Ser Thr Gly Leu Gly Phe Asn Ile Val Gly Gly
180 185 190

Glu Asp Gly Glu Gly Ile Phe Val Ser Phe Ile Leu Ala Gly Gly Pro
195 200 205

Ala Asp Leu Ser Gly Glu Leu Gln Arg Gly Asp Gln Ile Leu Ser Val
210 215 220

Asn Gly Ile Asp Leu Arg Gly Ala Ser His Glu Gln Ala Ala Ala Ala
225 230 235 240

Leu Lys Gly Ala Gly Gln Thr Val Thr Ile Ile Ala Gln Tyr Gln Pro
245 250 255

Glu Asp Tyr Ala Arg Phe Glu Ala Lys Ile His Asp Leu Arg Glu Gln
260 265 270

Met Met Asn His Ser Met Ser Ser Gly Ser Gly Ser Leu Arg Thr Asn
275 280 285

Gln Lys Arg Ser Leu Tyr Val Arg Ala Met Phe Asp Tyr Asp Lys Ser
290 295 300

Lys Asp Ser Gly Leu Pro Ser Gln Gly Leu Ser Phe Lys Tyr Gly Asp
305 310 315 320

Ile Leu His Val Ile Asn Ala Ser Asp Asp Glu Trp Trp Gln Ala Arg
325 330 335

Arg Val Met Leu Glu Gly Asp Ser Glu Glu Met Gly Val Ile Pro Ser
340 345 350

Lys Arg Arg Val Glu Arg Lys Glu Arg Ala Arg Leu Lys Thr Val Lys
355 360 365

Phe Asn Ala Lys Pro Gly Val Ile Asp Ser Lys Gly Ser Phe Asn Asp
370 375 380

Lys Arg Lys Lys Ser Phe Ile Phe Ser Arg Lys Phe Pro Phe Tyr Lys
385 390 395 400

Sequence listing as filed1.txt

Asn Lys Glu Gln Ser Glu Gln Glu Thr Ser Asp Pro Glu Arg Gly Gln
405 410 415

Glu Asp Leu Ile Leu Ser Tyr Glu Pro Val Thr Arg Gln Glu Ile Asn
420 425 430

Tyr Thr Arg Pro Val Ile Ile Leu Gly Pro Met Lys Asp Arg Ile Asn
435 440 445

Asp Asp Leu Ile Ser Glu Phe Pro Asp Lys Phe Gly Ser Cys Val Pro
450 455 460

His Thr Thr Arg Pro Lys Arg Asp Tyr Glu Val Asp Gly Arg Asp Tyr
465 470 475 480

His Phe Val Ile Ser Arg Glu Gln Met Glu Lys Asp Ile Gln Glu His
485 490 495

Lys Phe Ile Glu Ala Gly Gln Tyr Asn Asp Asn Leu Tyr Gly Thr Ser
500 505 510

Val Gln Ser Val Arg Phe Val Ala Glu Arg Gly Lys His Cys Ile Leu
515 520 525

Asp Val Ser Gly Asn Ala Ile Lys Arg Leu Gln Val Ala Gln Leu Tyr
530 535 540

Pro Ile Ala Ile Phe Ile Lys Pro Arg Ser Leu Glu Pro Leu Met Glu
545 550 555 560

Met Asn Lys Arg Leu Thr Glu Glu Gln Ala Lys Lys Thr Tyr Asp Arg
565 570 575

Ala Ile Lys Leu Glu Gln Glu Phe Gly Glu Tyr Phe Thr Ala Ile Val
580 585 590

Gln Gly Asp Thr Leu Glu Asp Ile Tyr Asn Gln Cys Lys Leu Val Ile
595 600 605

Glu Glu Gln Ser Gly Pro Phe Ile Trp Ile Pro Ser Lys Glu Lys Leu
610 615 620

<210> 264

<211> 3071

<212> DNA

Sequence listing as filed1.txt

<213> Homo sapiens

<400> 264

aaaagcaact gaggtcttaa ctttcagacg ctgaattctc atctaattga aattactggg	60
cataatgcta tatatagcca atgaagagat tttgagctct cactcagtgc cttcaagaca	120
tgctgttttg tagtcagaga aaacagagat caatgcattt tcaaactgac agagggaacg	180
gatgctcttt agtagcacat gcccaggatc gtgtgtgtgg ggcttgcgct gtgctgagaa	240
gctgaatacc ggtccatatg ctccttattt actgcaatgt tctttgcatg ttactgtgca	300
ctccggacta acgtgaagaa gtatcgatat caagatgagg acgctccaca tgatcattcc	360
ttacctcgac taaccacga agtaagaggc ccagaactcg tgcatgtatc agaaaagaac	420
ctctctcaaa tagaaaatgt ccatggatat gtcctgcagt ctcataattt tcctctgaag	480
gccagtcctg ctcctataat tgtcaacaca gatactttgg acacaattcc ttatgtcaat	540
gggacagaaa ttgaatatga atttgaagaa attacactgg agagggggaa ttctggcctg	600
ggattcagta ttgctggggg gacagataat cccacattg gagatgacc tggtcatattt	660
attacgaaga ttataccagg aggtgctgca gcagaggatg gcagactcag ggtcaatgat	720
tgtatcttgc ggggtgaatga ggttgatgtg tcagaggttt cccacagtaa agcgggtggaa	780
gccctgaagg aagcagggtc tatcgctcgg ctgtatgtgc gtagaagacg acctattttg	840
gagaccgttg tggaaatcaa actgttcaaa ggccctaaag gtttaggctt cagtattgca	900
ggagggtgtg ggaaccaaca cattcctgga gacaacagca tttatgtaac taaaattata	960
gatggaggag ctgcacaaaa agatggaagg ttgcaagtag gagatagact actaatggta	1020
aacaactaca gtttagaaga agtaacacac gaagaggcag tagcaatatt aaagaacaca	1080
tcagaggtag tttattttaa agttggcaac cccactacca tttatatgac tgatccttat	1140
ggtccacctg atattactca ctcttattct ccaccaatgg aaaaccatct actctctggc	1200
aacaatggca ctttagaata taaaacctcc ctgccacca tctctccagg gaggtactca	1260
ccaattccaa agcacatgct tgttgacgac gactacacca ggcctccgga acctgtttac	1320
agcactgtga acaaaactatg tgataagcct gcttctccca ggcactattc ccctgttgag	1380
tgtgacaaaa gcttcctcct ctgagctccc tattccact accacctagg cctgctacct	1440
gactctgaga tgaccagtca ttcccaacat agcaccgcaa ctcgtcagcc ttcaatgact	1500
ctccaacggg ccgtctccct ggaaggagag cctcgcaagg tagtcctgca caaaggctcc	1560
actggcctgg gcttcaacat tgtcggtagg gaagatggag aaggatattt tgtgtccttc	1620
attctggctg gtggaccagc agacctaatg ggggagctcc agagaggaga ccagatccta	1680
tcgggtgaatg gcattgacct ccgtggtgca tcccacgagc aggcagctgc tgcactaaag	1740

Sequence listing as filed1.txt

ggggctggac agacagtgac gattatagca caatatcaac ctgaagatta cgctcgattt	1800
gaggccaaaa tccatgacct acgagagcag atgatgaacc acagcatgag ctccgggtcc	1860
ggatccctgc gaaccaatca gaaacgctcc ctctacgtca gagccatggt cgactacgac	1920
aagagcaagg acagtgggct gccaaagtcaa ggacttagtt ttaaatatgg agatattctc	1980
cacgttatca atgcctctga tgatgagtgg tggcaagcca ggagagtcac gctggagggg	2040
gacagtgagg agatgggggt catccccagc aaaaggaggg tggaaagaaa ggaacgtgcc	2100
cgattgaaga cagtgaagtt taatgccaaa cctggagtga ttgattcgaa agggtcattc	2160
aatgacaagc gtaaaaaagag cttcatcttt tcacgaaaat tcccattcta caagaacaag	2220
gagcagagtg agcaggaaac cagtgatcct gaacgtggac aagaagacct cattctttcc	2280
tatgagcctg ttacaaggca ggaaataaac tacacccggc cggtgattat cctggggccc	2340
atgaaggatc ggatcaatga cgacttgata tctgaattcc ctgataaatt tggctcctgt	2400
gtgcctcata ctacgaggcc aaagcgagac tacgaggtgg atggcagaga ctatcacttt	2460
gtcatttcca gagaacaaat ggagaaagat atccaagagc acaagtttat agaagccggc	2520
cagtacaatg acaatttata tggaaccagt gtgcagtctg tgagatttgt agcagaaaga	2580
ggcaaacact gtatacttga tgtatcagga aatgctatca agcggttaca agttgcccag	2640
ctctatccca ttgccatctt cataaaaccc aggtctctgg aatctcttat ggagatgaat	2700
aagcgtctaa cagaggaaca agccaagaaa acctatgac gagcaattaa gctagaacaa	2760
gaatttggag aatattttac agctattgtc caaggagata ctttagaaga tatatataac	2820
caatgcaagc ttgttattga agagcaatct gggcctttca tctggattcc ctcaaaggaa	2880
aagttataaa ttagctactg cgctctctgac aacgacagaa gagcatttag aagaacaaaa	2940
tatatataac atactacttg gaggcctttta tgtttttgtt gcatttatgt ttttgcagtc	3000
aatgtgaatt cttacgaatg tacaacacaa actgtatgaa gccatgaagg aaacagaggg	3060
gccaaagggg g	3071

<210> 265

<211> 854

<212> PRT

<213> Homo sapiens

<400> 265

Phe	Phe	Ala	Cys	Tyr	Cys	Ala	Leu	Arg	Thr	Asn	Val	Lys	Lys	Tyr	Arg
1				5					10					15	

Sequence listing as filed1.txt

Tyr Gln Asp Glu Asp Ala Pro His Asp His Ser Leu Pro Arg Leu Thr
20 25 30

His Glu Val Arg Gly Pro Glu Leu Val His Val Glu Lys Asn Leu Ser
35 40 45

Gln Ile Glu Asn Val His Gly Tyr Val Leu Gln Ser His Ile Ser Pro
50 55 60

Leu Lys Ala Ser Pro Ala Pro Ile Ile Val Asn Thr Asp Thr Leu Asp
65 70 75 80

Thr Ile Pro Tyr Val Asn Gly Thr Glu Ile Glu Tyr Glu Phe Glu Glu
85 90 95

Ile Thr Leu Glu Gly Asn Ser Gly Leu Gly Phe Ser Ile Ala Gly Gly
100 105 110

Thr Asp Asn Pro His Ile Gly Asp Asp Pro Gly Ile Phe Ile Thr Lys
115 120 125

Ile Ile Pro Gly Gly Ala Ala Ala Glu Asp Gly Arg Leu Arg Val Asn
130 135 140

Asp Cys Ile Leu Arg Val Asn Glu Val Asp Val Ser Glu Ser His Ser
145 150 155 160

Lys Ala Val Glu Ala Leu Lys Glu Ala Gly Ser Ile Ala Arg Leu Tyr
165 170 175

Val Arg Arg Arg Arg Pro Ile Leu Glu Thr Val Val Glu Ile Lys Leu
180 185 190

Phe Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala Gly Gly Val Gly
195 200 205

Asn Gln His Ile Pro Gly Asn Ser Ile Tyr Val Thr Lys Ile Ile Asp
210 215 220

Gly Gly Ala Ala Gln Lys Asp Gly Arg Leu Gln Val Gly Asp Arg Leu
225 230 235 240

Leu Met Val Asn Asn Tyr Ser Leu Glu Glu Val Thr His Glu Glu Ala
245 250 255

Val Ala Ile Leu Lys Asn Thr Ser Glu Val Val Tyr Leu Lys Val Asn
260 265 270

Sequence listing as filed1.txt

Pro Thr Thr Ile Tyr Met Thr Asp Pro Tyr Gly Pro Pro Asp Ile Thr
275 280 285

His Ser Tyr Ser Pro Pro Met Glu Asn His Leu Leu Ser Gly Asn Asn
290 295 300

Gly Thr Leu Glu Tyr Lys Thr Ser Leu Pro Pro Ile Ser Pro Gly Arg
305 310 315 320

Tyr Ser Pro Ile Pro Lys His Met Val Asp Asp Asp Tyr Thr Arg Pro
325 330 335

Pro Glu Pro Val Tyr Ser Thr Val Asn Lys Leu Cys Asp Lys Pro Ala
340 345 350

Ser Pro Arg His Tyr Ser Pro Val Glu Cys Asp Lys Ser Phe Leu Leu
355 360 365

Ser Ala Pro Tyr Ser His Tyr His Leu Gly Leu Leu Pro Asp Ser Glu
370 375 380

Met Ser His Ser Gln His Ser Thr Ala Thr Arg Gln Pro Ser Met Thr
385 390 395 400

Leu Gln Arg Ala Val Ser Leu Glu Gly Glu Pro Arg Lys Val Val Leu
405 410 415

His Lys Gly Ser Thr Gly Leu Gly Phe Asn Ile Val Gly Gly Glu Asp
420 425 430

Gly Glu Gly Ile Phe Val Ser Phe Ile Leu Gly Gly Pro Ala Asp Leu
435 440 445

Ser Gly Glu Leu Gln Arg Gly Asp Gln Ile Leu Ser Val Asn Gly Ile
450 455 460

Asp Leu Arg Gly Ala Ser His Glu Gln Ala Ala Ala Ala Leu Lys Gly
465 470 475 480

Ala Gly Gln Thr Val Thr Ile Ile Ala Gln Tyr Gln Pro Glu Asp Tyr
485 490 495

Ala Arg Phe Ala Lys Ile His Asp Leu Arg Glu Gln Met Met Asn His
500 505 510

Ser Met Ser Ser Gly Ser Gly Ser Leu Arg Thr Asn Gln Lys Arg Ser
515 520 525

Sequence listing as filed1.txt

Leu Tyr Val Arg Ala Met Phe Asp Tyr Asp Lys Ser Lys Asp Ser Gly
 530 535 540
 Leu Pro Ser Gln Gly Leu Ser Phe Lys Tyr Gly Asp Leu His Val Ile
 545 550 555 560
 Asn Ala Ser Asp Asp Glu Trp Trp Gln Ala Arg Arg Val Met Leu Glu
 565 570 575
 Gly Asp Ser Glu Glu Met Gly Val Ile Pro Ser Lys Arg Arg Val Glu
 580 585 590
 Arg Lys Glu Arg Ala Arg Leu Lys Thr Val Lys Phe Asn Ala Lys Pro
 595 600 605
 Gly Val Ile Asp Ser Gly Ser Phe Asn Asp Lys Arg Lys Lys Ser Phe
 610 615 620
 Ile Phe Ser Arg Lys Phe Pro Phe Tyr Lys Asn Lys Glu Gln Ser Glu
 625 630 635 640
 Gln Glu Thr Ser Asp Pro Glu Arg Gly Gln Glu Asp Leu Ile Leu Ser
 645 650 655
 Tyr Glu Pro Val Thr Arg Gln Glu Ile Asn Tyr Thr Arg Pro Ile Ile
 660 665 670
 Leu Gly Pro Met Lys Asp Arg Ile Asn Asp Asp Leu Ile Ser Glu Phe
 675 680 685
 Pro Asp Lys Phe Gly Ser Cys Val Pro His Thr Thr Arg Pro Lys Arg
 690 695 700
 Asp Tyr Glu Val Asp Gly Arg Asp Tyr His Phe Val Ile Ser Arg Glu
 705 710 715 720
 Gln Met Glu Lys Asp Ile Gln His Lys Phe Ile Glu Ala Gly Gln Tyr
 725 730 735
 Asn Asp Asn Leu Tyr Gly Thr Ser Val Gln Ser Val Arg Phe Val Ala
 740 745 750
 Glu Arg Gly Lys His Cys Ile Leu Asp Val Ser Gly Asn Ala Ile Lys
 755 760 765
 Arg Leu Gln Val Ala Gln Leu Tyr Pro Ile Ala Ile Phe Ile Lys Pro

Ser Leu Glu Ser Leu Met Glu Met Asn Lys Arg Leu Thr Glu Glu Gln
785 790 795 800

Ala Lys Lys Thr Tyr Asp Arg Ala Ile Lys Leu Glu Gln Glu Phe Gly
805 810 815

Glu Tyr Phe Thr Ala Ile Val Gln Gly Asp Thr Leu Glu Asp Ile Tyr
820 825 830

Asn Gln Cys Lys Leu Val Ile Glu Glu Ser Gly Pro Phe Ile Trp Ile
835 840 845

Pro Ser Lys Glu Lys Leu
850

<210> 266

<211> 3046

<212> DNA

<213> Homo sapiens

<400> 266

gttggaaacg gcaactgctga gtgagggttga ggggtgtctc ggtatgtgcg ccttggatct	60
ggtgtaggcg aggtcacgcc tctcttcaga cagcccgagc cttcccggcc tggcgcgttt	120
agttcggaac tgcgggacgc cggtgggcta gggcaagggtg tgtgccctct tcctgattct	180
ggagaaaaat gccggtccgg aagcaagata cccagagagc attgcacctt ttggaggaat	240
atcgttcaaa actaagccaa actgaagaca gacagctcag aagttccata gaacgggtta	300
ttaacatatt tcagagcaac ctctttcagg ctttaataga tattcaagaa ttttatgaag	360
tgaccttact ggataatcca aaatgtatag atcgttcaaa gccgtctgaa ccaattcaac	420
ctgtgaatac ttgggagatt tccagccttc caagctctac tgtgacttca gagacactgc	480
caagcagcct tagccctagt gtagagaaat acaggtatca ggatgaagat acacctcctc	540
aagagcatat ttccccacaa atcacaaatg aagtgatagg tccagaattg gttcatgtct	600
cagagaagaa cttatcagag attgagaatg tccatggatt tgtttctcat tctcatattt	660
caccaataaa gccaacagaa gctgttcttc cctctcctcc cactgtccct gtgatccctg	720
tcctgccagt ccctgctgag aatactgtca tcctaccac cataccacag gcaaaccctc	780
ccccagtact ggtcaacaca gatagcttgg aaacaccaac ttacgttaat ggcacagatg	840
cagattatga atatgaagaa atcacacttg aaaggggaaa ttcaggggctt ggtttcagca	900

Sequence listing as filed1.txt

ttgcaggagg tacggacaac ccacacattg gagatgactc aagtattttc attaccaaaa	960
ttatcacagg gggagcagcc gcccaagatg gaagattgcg ggtcaatgac tgtatattac	1020
aagtaaataga agtagatggt cgtgatgtaa cacatagcaa agcagttgaa gcgttgaaag	1080
aagcaggggtc tattgtacgc ttgtatgtaa aaagaaggaa accagtgtca gaaaaataa	1140
tggaaataaa gctcattaaa ggtcctaaag gtcttgggtt tagcattgct ggaggtgttg	1200
gaaatcagca tttcctggg gataatagca tctatgtaac caaataaatt gaaggaggtg	1260
cagcacataa ggatggcaaa cttcagattg gagataaact tttagcagtg aataacgtat	1320
gtttagaaga agttactcat gaagaagcag taactgcctt aaagaacaca tctgattttg	1380
tttattttgaa agtggcaaaa cccacaagta tgtatatgaa tgatggctat gcaccacctg	1440
atatcaccaa ctcttcttct cagcctgttg ataaccatgt tagcccatct tccttcttg	1500
gccagacacc agcatctcca gccagatact cccagtttc taaagcagta cttggagatg	1560
atgaaattac aagggaaacct agaaaagtgt ttcttcatcg tggctcaacg ggccttggtt	1620
tcaacattgt aggaggagaa gatggagaag gaatatttat ttcctttatc ttagccggag	1680
gacctgctga tctaagtgga gagctcagaa aaggagatcg tattatatcg gtaaacagtg	1740
ttgacctcag agctgctagt catgagcagg cagcagctgc attgaaaaat gctggccagg	1800
ctgtcacaat tgttgcacaa tatcgacctg aagaatacag tcgttttgaa gctaaaatac	1860
atgatttacg ggagcagatg atgaatagta gtattagttc agggtcaggt tctcttcgaa	1920
ctagccagaa gcgatccctc tatgtcagag ccctttttga ttatgacaag actaaagaca	1980
gtgggcttcc cagtcaggga ctgaacttca aatttgagaa tatcctccat gttattaatg	2040
cttctgatga tgaatgggtg caagccaggc aggttacacc agatgggtgag agcgatgagg	2100
tcggagtgat tcccagtaaa cgcagagttg agaagaaaga acgagcccga ttaaaaacag	2160
tgaaattcaa ttctaaaacg agagataaag ggcagtcatt caatgacaag cgtaaaaaga	2220
acctcttttc ccgaaaattc cccttctaca agaacaagga ccagagttag caggaaacaa	2280
gtgatgctga ccagcatgta acttctaata ccagcgatag tgaaagtagt taccgtgggtc	2340
aagaagaata cgtcttatct tatgaaccag tgaatcaaca agaagttaat tatactcgac	2400
cagtgatcat attgggacct atgaaagaca ggataaatga tgacttgatc tcagaatttc	2460
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ataaattcat tgaagctggc cagtataaca atcatctata tggaacaagt gttcagtctg	2640
tacgagaagt agcaggaaaag ggcaaacact gtatccttga tgtgtctgga aatgccataa	2700
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Sequence listing as filed1.txt

aaaatatcat ggaaatgaat aagcgtctaa cagaagaaca agccagaaaa acatttgaga 2820
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tctgggttcc ggcaaaagaa aagctatgaa aactcatgtt tctctgtttc tcttttccac 3000
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<210> 267

<211> 926

<212> PRT

<213> Homo sapiens

<400> 267

Met Pro Val Arg Lys Gln Asp Thr Gln Arg Ala Leu His Leu Leu Glu
1 5 10 15
Glu Tyr Arg Ser Lys Leu Ser Gln Thr Glu Asp Arg Gln Leu Arg Ser
20 25 30
Ser Ile Glu Arg Val Ile Asn Ile Phe Gln Ser Asn Leu Phe Gln Ala
35 40 45
Leu Ile Asp Ile Gln Glu Phe Tyr Glu Val Thr Leu Leu Asp Asn Pro
50 55 60
Lys Cys Ile Asp Arg Ser Lys Pro Ser Glu Pro Ile Gln Pro Val Asn
65 70 75 80
Thr Trp Glu Ile Ser Ser Leu Pro Ser Ser Thr Val Thr Ser Glu Thr
85 90 95
Leu Pro Ser Ser Leu Ser Pro Ser Val Glu Lys Tyr Arg Tyr Gln Asp
100 105 110
Glu Asp Thr Pro Pro Gln Glu His Ile Ser Pro Gln Ile Thr Asn Glu
115 120 125
Val Ile Gly Pro Glu Leu Val His Val Ser Glu Lys Asn Leu Ser Glu
130 135 140
Ile Glu Asn Val His Gly Phe Val Ser His Ser His Ile Ser Pro Ile
145 150 155 160

Sequence listing as filed1.txt

Lys Pro Thr Glu Ala Val Leu Pro Ser Pro Pro Thr Val Pro Val Ile
165 170 175

Pro Val Leu Pro Val Pro Ala Glu Asn Thr Val Ile Leu Pro Thr Ile
180 185 190

Pro Gln Ala Asn Pro Pro Pro Val Leu Val Asn Thr Asp Ser Leu Glu
195 200 205

Thr Pro Thr Tyr Val Asn Gly Thr Asp Ala Asp Tyr Glu Tyr Glu Glu
210 215 220

Ile Thr Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile Ala Gly
225 230 235 240

Gly Thr Asp Asn Pro His Ile Gly Asp Asp Ser Ser Ile Phe Ile Thr
245 250 255

Lys Ile Ile Thr Gly Gly Ala Ala Ala Gln Asp Gly Arg Leu Arg Val
260 265 270

Asn Asp Cys Ile Leu Gln Val Asn Glu Val Asp Val Arg Asp Val Thr
275 280 285

His Ser Lys Ala Val Glu Ala Leu Lys Glu Ala Gly Ser Ile Val Arg
290 295 300

Leu Tyr Val Lys Arg Arg Lys Pro Val Ser Glu Lys Ile Met Glu Ile
305 310 315 320

Lys Leu Ile Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala Gly Gly
325 330 335

Val Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr Val Thr Lys
340 345 350

Ile Ile Glu Gly Gly Ala Ala His Lys Asp Gly Lys Leu Gln Ile Gly
355 360 365

Asp Lys Leu Leu Ala Val Asn Asn Val Cys Leu Glu Glu Val Thr His
370 375 380

Glu Glu Ala Val Thr Ala Leu Lys Asn Thr Ser Asp Phe Val Tyr Leu
385 390 395 400

Lys Val Ala Lys Pro Thr Ser Met Tyr Met Asn Asp Gly Tyr Ala Pro
405 410 415

Sequence listing as filed1.txt

Pro Asp Ile Thr Asn Ser Ser Ser Gln Pro Val Asp Asn His Val Ser
420 425 430

Pro Ser Ser Phe Leu Gly Gln Thr Pro Ala Ser Pro Ala Arg Tyr Ser
435 440 445

Pro Val Ser Lys Ala Val Leu Gly Asp Asp Glu Ile Thr Arg Glu Pro
450 455 460

Arg Lys Val Val Leu His Arg Gly Ser Thr Gly Leu Gly Phe Asn Ile
465 470 475 480

Val Gly Gly Glu Asp Gly Glu Gly Ile Phe Ile Ser Phe Ile Leu Ala
485 490 495

Gly Gly Pro Ala Asp Leu Ser Gly Glu Leu Arg Lys Gly Asp Arg Ile
500 505 510

Ile Ser Val Asn Ser Val Asp Leu Arg Ala Ala Ser His Glu Gln Ala
515 520 525

Ala Ala Ala Leu Lys Asn Ala Gly Gln Ala Val Thr Ile Val Ala Gln
530 535 540

Tyr Arg Pro Glu Glu Tyr Ser Arg Phe Glu Ala Lys Ile His Asp Leu
545 550 555 560

Arg Glu Gln Met Met Asn Ser Ser Ile Ser Ser Gly Ser Gly Ser Leu
565 570 575

Arg Thr Ser Gln Lys Arg Ser Leu Tyr Val Arg Ala Leu Phe Asp Tyr
580 585 590

Asp Lys Thr Lys Asp Ser Gly Leu Pro Ser Gln Gly Leu Asn Phe Lys
595 600 605

Phe Gly Asp Ile Leu His Val Ile Asn Ala Ser Asp Asp Glu Trp Trp
610 615 620

Gln Ala Arg Gln Val Thr Pro Asp Gly Glu Ser Asp Glu Val Gly Val
625 630 635 640

Ile Pro Ser Lys Arg Arg Val Glu Lys Lys Glu Arg Ala Arg Leu Lys
645 650 655

Thr Val Lys Phe Asn Ser Lys Thr Arg Asp Lys Gly Gln Ser Phe Asn
660 665 670

Sequence listing as filed1.txt

Asp Lys Arg Lys Lys Asn Leu Phe Ser Arg Lys Phe Pro Phe Tyr Lys
675 680 685

Asn Lys Asp Gln Ser Glu Gln Glu Thr Ser Asp Ala Asp Gln His Val
690 695 700

Thr Ser Asn Ala Ser Asp Ser Glu Ser Ser Tyr Arg Gly Gln Glu Glu
705 710 715 720

Tyr Val Leu Ser Tyr Glu Pro Val Asn Gln Gln Glu Val Asn Tyr Thr
725 730 735

Arg Pro Val Ile Ile Leu Gly Pro Met Lys Asp Arg Ile Asn Asp Asp
740 745 750

Leu Ile Ser Glu Phe Pro Asp Lys Phe Gly Ser Cys Val Pro His Thr
755 760 765

Thr Arg Pro Lys Arg Asp Tyr Glu Val Asp Gly Arg Asp Tyr His Phe
770 775 780

Val Thr Ser Arg Glu Gln Met Glu Lys Asp Ile Gln Glu His Lys Phe
785 790 795 800

Ile Glu Ala Gly Gln Tyr Asn Asn His Leu Tyr Gly Thr Ser Val Gln
805 810 815

Ser Val Arg Glu Val Ala Gly Lys Gly Lys His Cys Ile Leu Asp Val
820 825 830

Ser Gly Asn Ala Ile Lys Arg Leu Gln Ile Ala Gln Leu Tyr Pro Ile
835 840 845

Ser Ile Phe Ile Lys Pro Lys Ser Met Glu Asn Ile Met Glu Met Asn
850 855 860

Lys Arg Leu Thr Glu Glu Gln Ala Arg Lys Thr Phe Glu Arg Ala Met
865 870 875 880

Lys Leu Glu Gln Glu Phe Thr Glu His Phe Thr Ala Ile Val Gln Gly
885 890 895

Asp Thr Leu Glu Asp Ile Tyr Asn Gln Val Lys Gln Ile Ile Glu Glu
900 905 910

Gln Ser Gly Ser Tyr Ile Trp Val Pro Ala Lys Glu Lys Leu

Sequence listing as filed1.txt
920 925

915

<210> 268
<211> 515
<212> DNA
<213> Drosophila melanogaster

<400> 268
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agccaaagtc aggtgcatca gcagcagcat gcgacgccga tggtaattc gcagtcgaca 120
ggtgcgctaa atagtatggg acagacgggt gtcgattcac catcaatacc acaagcagcc 180
gcagcagtag cagcagcagc aaatgcatct gcctctgcat cagtcattgc aagcaacaac 240
acaatcagca acaccacagt caccacagtc acggccacgg ccacagccag caacagtagc 300
agcaagttgc cgccgtcgct tggcgctaac agcagcatta gcattagcaa tagcaatagc 360
aatagcaaca gcaataatat caacaacatt aatagcatca acaacaaca cagtagcagc 420
agcagcacga cggcaactgt tgcagcagca acaccaacag cagcatcagc agcagcagca 480
gcagcatcat ctccacccgc caactccttc tataa 515

<210> 269
<211> 48
<212> DNA
<213> Artificial sequence

<220>
<223> Primer
<400> 269
taatacgact cactataggg agaggaggcc ttcatccgg acaacaat 48

<210> 270
<211> 48
<212> DNA
<213> Artificial sequence

<220>

Sequence listing as filed1.txt

<223> Primer

<400> 270

taatacgact cactataggg agattataga aggagttggc gggaggag

48

<210> 271

<211> 21

<212> RNA

<213> Artificial sequence

<220>

<223> short interfering RNA

<400> 271

aacauugucg guggggaaga u

21

<210> 272

<211> 21

<212> RNA

<213> Artificial sequence

<220>

<223> short interfering RNA

<400> 272

aaaaccagg ucucuggaac c

21

<210> 273

<211> 21

<212> RNA

<213> Artificial sequence

<220>

<223> short interfering RNA

<400> 273

aaaggggaaa uucagggcuu g

21

<210> 274

<211> 21

Sequence listing as filed1.txt

<212> RNA

<213> Artificial sequence

<220>

<223> short interfering RNA

<400> 274

aaguagcagg aaagggcaaa c 21

<210> 275

<211> 792

<212> DNA

<213> Drosophila melanogaster

<400> 275

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aacgatcttc	gatcggcgcc	gagtcattgct	gcaacagcaa	cagcaacagc	aacaacaacg	120
gcaacagttg	caactgcaac	cgcaacaaca	acggccaacc	ggcagcagca	acatcataat	180
caccataatc	agcagcaaat	gcaatcaagg	caattgcatg	cacatcattg	gcagagcatt	240
aacaacaata	agaataacaa	cattagtaac	aaaaacaaca	acaacaacaa	caataataac	300
aataacatta	ataacaataa	taataataat	aatcattcgg	cacacccacc	ttgcctgatc	360
gatattaagc	tgaagtcaag	ccgatcggca	gcaacaaaaa	taaccatac	aacaaccgcc	420
aatcagctgc	agcaacaaca	acgccgccgt	gtggcaccca	agccactgcc	acgccaccgc	480
cgacgtaccc	gccaacggg	acaaaaggag	gtggggccgt	ctgaagagga	tggggacacg	540
gatgccagtg	acctggccaa	tatgacatca	ccgctgagcg	ccagtgcagc	ggccactcga	600
atcaacggcc	tctcgccgga	agtgaagaaa	gtccagcggt	tgccactgtg	gaatgcgcga	660
aacggaaacg	gaagtaccac	caccactgt	caccaaccg	gcgtctctgt	gcaacgccgt	720
ctgcccattc	aaagtcatca	gcagcgaatt	ctaaaccaac	gatttcatca	ccagcgaatg	780
catcatgggt	aa					792

<210> 276

<211> 262

<212> PRT

<213> Drosophila melanogaster

Sequence listing as filed1.txt

<400> 276

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Met Phe Ala Ile Ser Leu Gln Leu Leu Ser Ser Leu Ala Ser Asp Leu
1      5      10      15

Asp Ile Met Leu Asn Asp Leu Arg Ser Ala Pro Ser His Ala Ala Thr
20      25      30

Ala Thr Ala Thr Ala Thr Thr Thr Ala Thr Val Ala Thr Ala Thr Ala
35      40      45

Thr Thr Thr Ala Asn Arg Gln Gln Gln His His Asn His His Asn Gln
50      55      60

Gln Gln Met Gln Ser Arg Gln Leu His Ala His His Trp Gln Ser Ile
65      70      75      80

Asn Asn Lys Asn Asn Asn Ile Ser Asn Lys Asn Asn Asn Asn Asn Asn
85      90      95

Asn Asn Asn Asn Asn Ile Asn Asn Asn Asn Asn Asn Asn His Ser
100     105     110

Ala His Pro Pro Cys Leu Ile Asp Ile Lys Leu Lys Ser Ser Arg Ser
115     120     125

Ala Ala Thr Lys Ile Thr His Thr Thr Thr Ala Asn Gln Leu Gln Gln
130     135     140

Gln Gln Arg Arg Arg Val Ala Pro Lys Pro Leu Pro Arg Pro Pro Arg
145     150     155     160

Arg Thr Arg Pro Thr Gly Gln Lys Glu Val Gly Pro Ser Glu Glu Asp
165     170     175

Gly Asp Thr Asp Ala Ser Asp Leu Ala Asn Met Thr Ser Pro Leu Ser
180     185     190

Ala Ser Ala Ala Ala Thr Arg Ile Asn Gly Leu Ser Pro Glu Val Lys
195     200     205

Lys Val Gln Arg Leu Pro Leu Trp Asn Ala Arg Asn Gly Asn Gly Ser
210     215     220

Thr Thr Thr His Cys His Pro Thr Gly Val Ser Val Gln Arg Arg Leu
225     230     235     240

```

Sequence listing as filed1.txt

Pro Ile Gln Ser His Gln Gln Arg Ile Leu Asn Gln Arg Phe His His
245 250 255

Gln Arg Met His His Gly
260

<210> 277

<211> 1821

<212> DNA

<213> Homo sapiens

<400> 277

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gagggggaaa	gtgaccaaga	gaccatggcg	ccccccatca	agtccaaaaa	gaaaaggagc	180
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agctccttca	tgacccccga	gaagcggatg	gtccgcagga	tcgccgagct	ttcccgggac	300
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gagtgccacg	tgtccagcac	cgacatgctg	cagaccatcc	ggcagttcat	gaccaggtc	420
aagaactatt	tgtctcagag	ctcggagctg	gaccccccca	tcgagtcgct	gatccctgaa	480
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aaggagaacc	tgcagcttgt	gcggcagagg	aatccgcagg	agctgggggt	cttcgccccg	660
acccttgatt	ttgtggatgt	ggagaaaatc	aaagtcaagt	tcagtaccat	gcagaagatg	720
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gtcatagccc	agtgtgacat	gcttgaattg	gacactgaaa	tcgagtacat	gatggagctc	900
ctagacccat	cgctgttaca	tggagaagga	ggctattact	tgacaagcgc	atatggagca	960
ctttctctga	taaagaattt	ccaagaagaa	caagcagcgc	gactgctcag	ctcagaaacc	1020
agagacaccc	tgaggcagtg	gcacaaacgg	agaaccacca	accggaccat	cccctctgtg	1080
gacgacttcc	agaattacct	ccgagttgca	tttcaggagg	tcaacagtgg	ttgcacagga	1140
aagaccctcc	ttgtgagacc	ttacatcacc	actgaggatg	tgtgtcagat	ctgcgctgag	1200
aagttcaagg	tgggggaccc	tgaggagtac	agcctctttc	tcttcgttga	cgagacatgg	1260
cagcagctgg	cagaggacac	ttaccctcaa	aaaatcaagg	cggagctgca	cagccgacca	1320

Sequence listing as filed1.txt

cagccccaca tcttccactt tgtctacaaa cgcatcaaga acgatcctta tggcatcatt 1380
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 tgcattccaaa ggggagctgg aagccttgcc ttcccgcttc tacatgcttg agcttgaaaa 1500
 gcagtcacct cctcggggac ccctcagtgt agtgactaag ccatccacag gccaactcgg 1560
 ccaagggcaa ctttagccac gcaaggtagc tgaggtttgt gaaacagtag gattctcttt 1620
 tggcaatgga gaattgcatc tgatggttca agtgtcctga gattgtttgc tacctacccc 1680
 cagtcagggtt ctaggttggc ttacaggtat gtatatgtgc agaagaaaca cttagatac 1740
 aagttctttt gaattcaaca gcagatgctt gcgatgcagt gcgtcagggtg attctcactc 1800
 ctgtggatgg cttcatccct g 1821

<210> 278

<211> 471

<212> PRT

<213> Homo sapiens

<400> 278

Gly Arg Gln Arg Leu Ser Asp Met Ser Ile Ser Thr Ser Ser Ser Asp
 1 5 10 15

Ser Leu Glu Phe Asp Arg Ser Met Pro Leu Phe Gly Tyr Glu Ala Asp
 20 25 30

Thr Asn Ser Ser Leu Glu Asp Tyr Glu Gly Glu Ser Asp Gln Glu Thr
 35 40 45

Met Ala Pro Pro Ile Lys Ser Lys Lys Lys Arg Ser Ser Ser Phe Val
 50 55 60

Leu Pro Lys Leu Val Lys Ser Gln Leu Gln Lys Val Ser Gly Val Phe
 65 70 75 80

Ser Ser Phe Met Thr Pro Glu Lys Arg Met Val Arg Arg Ile Ala Glu
 85 90 95

Leu Ser Arg Asp Lys Cys Thr Tyr Phe Gly Cys Leu Val Gln Asp Tyr
 100 105 110

Val Ser Phe Leu Gln Glu Asn Lys Glu Cys His Val Ser Ser Thr Asp
 115 120 125

Sequence listing as filed1.txt

Met Leu Gln Thr Ile Arg Gln Phe Met Thr Gln Val Lys Asn Tyr Leu
130 135 140

Ser Gln Ser Ser Glu Leu Asp Pro Pro Ile Glu Ser Leu Ile Pro Glu
145 150 155 160

Asp Gln Ile Asp Val Val Leu Glu Lys Ala Met His Lys Cys Ile Leu
165 170 175

Lys Pro Leu Lys Gly His Val Glu Ala Met Leu Lys Asp Phe His Met
180 185 190

Ala Asp Gly Ser Trp Lys Gln Leu Lys Glu Asn Leu Gln Leu Val Arg
195 200 205

Gln Arg Asn Pro Gln Glu Leu Gly Val Phe Ala Pro Thr Pro Asp Phe
210 215 220

Val Asp Val Glu Lys Ile Lys Val Lys Phe Met Thr Met Gln Lys Met
225 230 235 240

Tyr Ser Pro Glu Lys Lys Val Met Leu Leu Arg Val Cys Lys Leu
245 250 255

Ile Tyr Thr Val Met Glu Asn Asn Ser Gly Arg Met Tyr Gly Ala Asp
260 265 270

Asp Phe Leu Pro Val Leu Thr Tyr Val Ile Ala Gln Cys Asp Met Leu
275 280 285

Glu Leu Asp Thr Glu Ile Glu Tyr Met Met Glu Leu Leu Asp Pro Ser
290 295 300

Leu Leu His Gly Glu Gly Gly Tyr Tyr Leu Thr Ser Ala Tyr Gly Ala
305 310 315 320

Leu Ser Leu Ile Lys Asn Phe Gln Glu Glu Gln Ala Ala Arg Leu Leu
325 330 335

Ser Ser Glu Thr Arg Asp Thr Leu Arg Gln Trp His Lys Arg Arg Thr
340 345 350

Thr Asn Arg Thr Ile Pro Ser Val Asp Asp Phe Gln Asn Tyr Leu Arg
355 360 365

Val Ala Phe Gln Glu Val Asn Ser Gly Cys Thr Gly Lys Thr Leu Leu
370 375 380

Sequence listing as filed1.txt

Val Arg Pro Tyr Ile Thr Thr Glu Asp Val Cys Gln Ile Cys Ala Glu
385 390 395 400

Lys Phe Lys Val Gly Asp Pro Glu Glu Tyr Ser Leu Phe Leu Phe Val
405 410 415

Asp Glu Thr Trp Gln Gln Leu Ala Glu Asp Thr Tyr Pro Gln Lys Ile
420 425 430

Lys Ala Glu Leu His Ser Arg Pro Gln Pro His Ile Phe His Phe Val
435 440 445

Tyr Lys Arg Ile Lys Asn Asp Pro Tyr Gly Ile Ile Phe Gln Asn Gly
450 455 460

Glu Glu Asp Leu Thr Thr Ser
465 470

<210> 279

<211> 686

<212> PRT

<213> Drosophila melanogaster

<400> 279

Met Ser Ser Arg Arg Trp Phe His Pro Thr Ile Ser Gly Ile Glu Ala
1 5 10 15

Glu Lys Leu Leu Gln Glu Gln Gly Phe Asp Gly Ser Phe Leu Ala Arg
20 25 30

Leu Ser Ser Ser Asn Pro Gly Ala Phe Thr Leu Ser Val Arg Arg Gly
35 40 45

Asn Glu Val Thr His Ile Lys Ile Gln Asn Asn Gly Asp Phe Phe Asp
50 55 60

Leu Tyr Gly Gly Glu Lys Phe Ala Thr Leu Pro Glu Leu Val Gln Tyr
65 70 75 80

Tyr Met Glu Asn Gly Glu Leu Lys Glu Lys Asn Gly Gln Ala Ile Glu
85 90 95

Leu Lys Gln Pro Leu Ile Cys Ala Glu Pro Thr Thr Glu Arg Trp Phe
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Sequence listing as filed1.txt

100																			
His	Gly	Asn	Leu	Ser	Gly	Lys	Glu	Ala	Glu	Lys	Leu	Ile	Leu	Glu	Arg				
		115					120					125							
Gly	Lys	Asn	Gly	Ser	Phe	Leu	Val	Arg	Glu	Ser	Gln	Ser	Lys	Pro	Gly				
	130					135					140								
Asp	Phe	Val	Leu	Ser	Val	Arg	Thr	Asp	Asp	Lys	Val	Thr	His	Val	Met				
145					150					155					160				
Ile	Arg	Trp	Gln	Asp	Lys	Lys	Tyr	Asp	Val	Gly	Gly	Gly	Glu	Ser	Phe				
				165					170					175					
Gly	Thr	Leu	Ser	Glu	Leu	Ile	Asp	His	Tyr	Lys	Arg	Asn	Pro	Met	Val				
			180					185					190						
Glu	Thr	Cys	Gly	Thr	Val	Val	His	Leu	Arg	Gln	Pro	Phe	Asn	Ala	Thr				
		195					200					205							
Arg	Ile	Thr	Ala	Ala	Gly	Ile	Asn	Ala	Arg	Val	Glu	Gln	Leu	Val	Lys				
	210					215					220								
Gly	Gly	Phe	Trp	Glu	Glu	Phe	Glu	Ser	Leu	Gln	Gln	Asp	Ser	Arg	Asp				
225					230					235					240				
Thr	Phe	Ser	Arg	Asn	Glu	Gly	Tyr	Lys	Gln	Glu	Asn	Arg	Leu	Lys	Asn				
				245					250					255					
Arg	Tyr	Arg	Asn	Ile	Leu	Pro	Tyr	Asp	His	Thr	Arg	Val	Lys	Leu	Leu				
			260					265					270						
Asp	Val	Glu	His	Ser	Val	Ala	Gly	Ala	Glu	Tyr	Ile	Asn	Ala	Asn	Tyr				
		275					280					285							
Ile	Arg	Leu	Pro	Thr	Asp	Gly	Asp	Leu	Tyr	Asn	Met	Ser	Ser	Ser	Ser				
	290					295					300								
Glu	Ser	Leu	Asn	Ser	Ser	Val	Pro	Ser	Cys	Pro	Ala	Cys	Thr	Ala	Ala				
305					310					315					320				
Gln	Thr	Gln	Arg	Asn	Cys	Ser	Asn	Cys	Gln	Leu	Gln	Asn	Lys	Thr	Cys				
				325					330					335					
Val	Gln	Cys	Ala	Val	Lys	Ser	Ala	Ile	Leu	Pro	Tyr	Ser	Asn	Cys	Ala				
			340					345					350						

Sequence listing as filed1.txt

Thr Cys Ser Arg Lys Ser Asp Ser Leu Ser Lys His Lys Arg Ser Glu
355 360 365

Ser Ser Ala Ser Ser Ser Pro Ser Ser Gly Ser Gly Ser Gly Pro Gly
370 375 380

Ser Ser Gly Thr Ser Gly Val Ser Ser Val Asn Gly Pro Gly Thr Pro
385 390 395 400

Thr Asn Leu Thr Ser Gly Thr Ala Gly Cys Leu Val Gly Leu Leu Lys
405 410 415

Arg His Ser Asn Asp Ser Ser Gly Ala Val Ser Ile Ser Met Ala Glu
420 425 430

Arg Glu Arg Glu Arg Glu Arg Glu Met Phe Lys Thr Tyr Ile Ala Thr
435 440 445

Gln Gly Cys Leu Leu Thr Gln Gln Val Asn Thr Val Thr Asp Phe Trp
450 455 460

Asn Met Val Trp Gln Glu Asn Thr Arg Val Ile Val Met Thr Thr Lys
465 470 475 480

Glu Tyr Glu Arg Gly Lys Glu Lys Cys Ala Arg Tyr Trp Pro Asp Glu
485 490 495

Gly Arg Ser Glu Gln Phe Gly His Ala Arg Ile Gln Cys Val Ser Glu
500 505 510

Asn Ser Thr Ser Asp Tyr Thr Leu Arg Glu Phe Leu Val Ser Trp Arg
515 520 525

Asp Gln Pro Ala Arg Arg Ile Phe His Tyr His Phe Gln Val Trp Pro
530 535 540

Asp His Gly Val Pro Ala Asp Pro Gly Cys Val Leu Asn Phe Leu Gln
545 550 555 560

Asp Val Asn Thr Arg Gln Ser His Leu Ala Gln Ala Gly Glu Lys Pro
565 570 575

Gly Pro Ile Cys Val His Cys Ser Ala Gly Ile Gly Arg Thr Gly Thr
580 585 590

Phe Ile Val Ile Asp Met Ile Leu Asp Gln Ile Val Arg Asn Gly Leu
595 600 605

Sequence listing as filed1.txt

Asp Thr Glu Ile Asp Ile Gln Arg Thr Ile Gln Met Val Arg Ser Gln
610 615 620

Arg Ser Gly Leu Val Gln Thr Glu Ala Gln Tyr Lys Phe Val Tyr Tyr
625 630 635 640

Ala Val Gln His Tyr Ile Gln Thr Leu Ile Ala Arg Lys Arg Ala Glu
645 650 655

Glu Gln Ser Leu Gln Val Gly Arg Glu Tyr Thr Asn Ile Lys Tyr Thr
660 665 670

Gly Glu Ile Gly Asn Asp Ser Gln Arg Ser Pro Leu Pro Pro
675 680 685

<210> 280

<211> 562

<212> PRT

<213> Homo sapiens

<400> 280

Met Thr Ser Arg Arg Trp Phe His Pro Asn Ile Thr Gly Val Glu Ala
1 5 10 15

Glu Asn Leu Leu Leu Thr Arg Gly Val Asp Gly Ser Phe Leu Ala Arg
20 25 30

Pro Ser Lys Ser Asn Pro Gly Asp Phe Thr Leu Ser Val Arg Arg Asn
35 40 45

Gly Ala Val Thr His Ile Lys Ile Gln Asn Thr Gly Asp Tyr Tyr Asp
50 55 60

Leu Tyr Gly Gly Glu Lys Phe Ala Thr Leu Ala Glu Leu Val Gln Tyr
65 70 75 80

Tyr Met Glu His His Gly Gln Leu Lys Glu Lys Asn Gly Asp Val Ile
85 90 95

Glu Leu Lys Tyr Pro Leu Asn Cys Ala Asp Pro Thr Ser Glu Arg Trp
100 105 110

Phe His Gly His Leu Ser Gly Lys Glu Ala Glu Lys Leu Leu Thr Glu
115 120 125

Sequence listing as filed1.txt

Lys Gly Lys His Gly Ser Phe Leu Val Arg Glu Ser Gln Ser His Pro
 130 135 140
 Gly Asp Phe Val Leu Ser Val Arg Thr Gly Asp Asp Lys Gly Glu Ser
 145 150 155 160
 Asn Asp Gly Lys Ser Lys Val Thr His Val Met Ile Arg Cys Gln Glu
 165 170 175
 Leu Lys Tyr Asp Val Gly Gly Gly Glu Arg Phe Asp Ser Leu Thr Asp
 180 185 190
 Leu Val Glu His Tyr Lys Lys Asn Pro Met Val Glu Thr Leu Gly Thr
 195 200 205
 Val Leu Gln Leu Lys Gln Pro Leu Asn Thr Thr Arg Ile Asn Ala Ala
 210 215 220
 Glu Ile Glu Ser Arg Val Arg Glu Leu Ser Lys Leu Ala Glu Thr Thr
 225 230 235 240
 Asp Lys Val Lys Gln Gly Phe Trp Glu Glu Phe Glu Thr Leu Gln Gln
 245 250 255
 Gln Glu Cys Lys Leu Leu Tyr Ser Arg Lys Glu Gly Gln Arg Gln Glu
 260 265 270
 Asn Lys Asn Lys Asn Arg Tyr Lys Asn Ile Leu Pro Phe Asp His Thr
 275 280 285
 Arg Val Val Leu His Asp Gly Asp Pro Asn Glu Pro Val Ser Asp Tyr
 290 295 300
 Ile Asn Ala Asn Ile Ile Met Pro Glu Phe Glu Thr Lys Cys Asn Asn
 305 310 315 320
 Ser Lys Pro Lys Lys Ser Tyr Ile Ala Thr Gln Gly Cys Leu Gln Asn
 325 330 335
 Thr Val Asn Asp Phe Trp Arg Met Val Phe Gln Glu Asn Ser Arg Val
 340 345 350
 Ile Val Met Thr Thr Lys Glu Val Glu Arg Gly Lys Ser Lys Cys Val
 355 360 365
 Lys Tyr Trp Pro Asp Glu Tyr Ala Leu Lys Glu Tyr Gly Val Met Arg
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Sequence listing as filed1.txt

370

375

380

Val Arg Asn Val Lys Glu Ser Ala Ala His Asp Tyr Thr Leu Arg Glu
385 390 395 400

Leu Lys Leu Ser Lys Val Gly Gln Gly Asn Thr Glu Arg Thr Val Trp
405 410 415

Gln Tyr His Phe Arg Thr Trp Pro Asp His Gly Val Pro Ser Asp Pro
420 425 430

Gly Gly Val Leu Asp Phe Leu Glu Glu Val His His Lys Gln Glu Ser
435 440 445

Ile Met Asp Ala Gly Pro Val Val Val His Cys Ser Ala Gly Ile Gly
450 455 460

Arg Thr Gly Thr Phe Ile Val Ile Asp Ile Leu Ile Asp Ile Ile Arg
465 470 475 480

Glu Lys Gly Val Asp Cys Asp Ile Asp Val Pro Lys Thr Ile Gln Met
485 490 495

Val Arg Ser Gln Arg Ser Gly Met Val Gln Thr Glu Ala Gln Tyr Arg
500 505 510

Phe Ile Tyr Met Ala Val Gln His Tyr Ile Glu Thr Leu Gln Arg Arg
515 520 525

Ile Glu Glu Glu Gln Lys Ser Lys Arg Lys Gly His Glu Tyr Thr Asn
530 535 540

Ile Lys Tyr Ser Leu Ala Asp Gln Thr Ser Gly Asp Gln Ser Pro Leu
545 550 555 560

Pro Pro

<210> 281

<211> 508

<212> PRT

<213> Drosophila melanogaster

<220>

Sequence listing as filed1.txt

<221> MISC_FEATURE

<222> 132..146, 287..303

<223> Xaa is uncertain

<400> 281

Gln Pro Gly Ser Arg Tyr Ala Ser Thr Asn Val Leu Ala Ala Val Pro
1 5 10 15

Pro Gly Thr Pro Arg Ala Val Ser Thr Glu Asp Ile Thr Arg Glu Pro
20 25 30

Arg Thr Ile Thr Ile Gln Lys Gly Pro Gln Gly Leu Gly Phe Asn Ile
35 40 45

Val Gly Gly Glu Asp Gly Gln Gly Ile Tyr Val Ser Phe Ile Leu Ala
50 55 60

Gly Gly Pro Ala Asp Leu Gly Ser Glu Leu Lys Arg Gly Asp Gln Leu
65 70 75 80

Leu Ser Val Asn Asn Val Asn Leu Thr His Ala Thr His Glu Glu Ala
85 90 95

Ala Gln Ala Leu Lys Thr Ser Gly Gly Val Val Thr Leu Leu Ala Gln
100 105 110

Tyr Arg Pro Glu Glu Tyr Asn Arg Phe Glu Ala Arg Ile Gln Glu Leu
115 120 125

Lys Gln Gln Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
130 135 140

Xaa Xaa Gln Lys Arg Ser Leu Tyr Val Arg Ala Leu Phe Asp Tyr Asp
145 150 155 160

Pro Asn Arg Asp Asp Gly Leu Pro Ser Arg Gly Leu Pro Phe Lys His
165 170 175

Gly Asp Ile Leu His Val Thr Asn Ala Ser Asp Asp Glu Trp Trp Gln
180 185 190

Ala Arg Arg Val Leu Gly Asp Asn Glu Asp Glu Gln Ile Gly Ile Val
195 200 205

Pro Ser Lys Arg Arg Trp Glu Arg Lys Met Arg Ala Arg Asp Arg Ser
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Sequence listing as filed1.txt

210

215

220

Val Lys Phe Gln Gly His Ala Ala Ala Asn Asn Asn Leu Asp Lys Gln
 225 230 235 240

Ser Thr Leu Asp Arg Lys Lys Lys Asn Phe Thr Phe Ser Arg Lys Phe
 245 250 255

Pro Phe Met Lys Ser Arg Asp Glu Lys Asn Glu Asp Gly Ser Asp Gln
 260 265 270

Glu Pro Asn Gly Val Val Ser Ser Thr Ser Glu Ile Asp Ile Xaa Xaa
 275 280 285

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Val
 290 295 300

Leu Ser Tyr Glu Ala Val Gln Arg Leu Ser Ile Asn Tyr Thr Arg Pro
 305 310 315 320

Val Ile Ile Leu Gly Pro Leu Lys Asp Arg Ile Asn Asp Asp Leu Ile
 325 330 335

Ser Glu Tyr Pro Asp Lys Phe Gly Ser Cys Val Pro His Thr Thr Arg
 340 345 350

Pro Lys Arg Glu Tyr Glu Val Asp Gly Arg Asp Tyr His Phe Val Ser
 355 360 365

Ser Arg Glu Gln Met Glu Arg Asp Ile Gln Asn His Leu Phe Ile Glu
 370 375 380

Ala Gly Gln Tyr Asn Asp Asn Leu Tyr Gly Thr Ser Val Ala Ser Val
 385 390 395 400

Arg Glu Val Ala Glu Lys Gly Lys His Cys Ile Leu Asp Val Ser Gly
 405 410 415

Asn Ala Ile Lys Arg Leu Gln Val Ala Gln Leu Tyr Pro Val Ala Val
 420 425 430

Phe Ile Lys Pro Lys Ser Val Asp Ser Val Met Glu Met Asn Arg Arg
 435 440 445

Met Thr Glu Glu Gln Ala Lys Lys Thr Tyr Glu Arg Ala Ile Lys Met
 450 455 460

Sequence listing as filed1.txt

Glu Gln Glu Phe Gly Glu Tyr Phe Thr Gly Val Val Gln Gly Asp Thr
465 470 475 480

Ile Glu Glu Ile Tyr Ser Lys Val Lys Ser Met Ile Trp Ser Gln Ser
485 490 495

Gly Pro Thr Ile Trp Val Pro Ser Lys Glu Ser Leu
500 505

<210> 282

<211> 502

<212> PRT

<213> Homo sapiens

<400> 282

Gln Pro Val Asp Asn His Val Ser Pro Ser Ser Phe Leu Gly Gln Thr
1 5 10 15

Pro Ala Ser Pro Ala Arg Tyr Ser Pro Val Ser Lys Ala Val Leu Gly
20 25 30

Asp Asp Glu Ile Thr Arg Glu Pro Arg Lys Val Val Leu His Arg Gly
35 40 45

Ser Thr Gly Leu Gly Phe Asn Ile Val Gly Gly Glu Asp Gly Glu Gly
50 55 60

Ile Phe Ile Ser Phe Ile Leu Ala Gly Gly Pro Ala Asp Leu Ser Gly
65 70 75 80

Glu Leu Arg Lys Gly Asp Arg Ile Ile Ser Val Asn Ser Val Asp Leu
85 90 95

Arg Ala Ala Ser His Glu Gln Ala Ala Ala Ala Leu Lys Asn Ala Gly
100 105 110

Gln Ala Val Thr Ile Val Ala Gln Tyr Arg Pro Glu Glu Tyr Ser Arg
115 120 125

Phe Glu Ala Lys Ile His Asp Leu Arg Glu Gln Met Met Asn Ser Ser
130 135 140

Ile Ser Ser Gly Ser Gly Ser Leu Arg Thr Ser Gln Lys Arg Ser Leu
145 150 155 160

Sequence listing as filed1.txt

Tyr Val Arg Ala Leu Phe Asp Tyr Asp Lys Thr Lys Asp Ser Gly Leu
165 170 175

Pro Ser Gln Gly Leu Asn Phe Lys Phe Gly Asp Ile Leu His Val Ile
180 185 190

Asn Ala Ser Asp Asp Glu Trp Trp Gln Ala Arg Gln Val Thr Pro Asp
195 200 205

Gly Glu Ser Asp Glu Val Gly Val Ile Pro Ser Lys Arg Arg Val Glu
210 215 220

Lys Lys Glu Arg Ala Arg Leu Lys Thr Val Lys Phe Asn Ser Lys Thr
225 230 235 240

Arg Asp Lys Gly Gln Ser Phe Asn Asp Lys Arg Lys Lys Asn Leu Phe
245 250 255

Ser Arg Lys Phe Pro Phe Tyr Lys Asn Lys Asp Gln Ser Glu Gln Glu
260 265 270

Thr Ser Asp Ala Asp Gln His Val Thr Ser Asn Ala Ser Asp Ser Glu
275 280 285

Ser Ser Tyr Arg Gly Gln Glu Glu Tyr Val Leu Ser Tyr Glu Pro Val
290 295 300

Asn Gln Gln Glu Val Asn Tyr Thr Arg Pro Val Ile Ile Leu Gly Pro
305 310 315 320

Met Lys Asp Arg Ile Asn Asp Asp Leu Ile Ser Glu Phe Pro Asp Lys
325 330 335

Phe Gly Ser Cys Val Pro His Thr Thr Arg Pro Lys Arg Asp Tyr Glu
340 345 350

Val Asp Gly Arg Asp Tyr His Phe Val Thr Ser Arg Glu Gln Met Glu
355 360 365

Lys Asp Ile Gln Glu His Lys Phe Ile Glu Ala Gly Gln Tyr Asn Asn
370 375 380

His Leu Tyr Gly Thr Ser Val Gln Ser Val Arg Glu Val Ala Gly Lys
385 390 395 400

Gly Lys His Cys Ile Leu Asp Val Ser Gly Asn Ala Ile Lys Arg Leu
405 410 415

Sequence listing as filed1.txt

Gln Ile Ala Gln Leu Tyr Pro Ile Ser Ile Phe Ile Lys Pro Lys Ser
420 425 430

Met Glu Asn Ile Met Glu Met Asn Lys Arg Leu Thr Glu Glu Gln Ala
435 440 445

Arg Lys Thr Phe Glu Arg Ala Met Lys Leu Glu Gln Glu Phe Thr Glu
450 455 460

His Phe Thr Ala Ile Val Gln Gly Asp Thr Leu Glu Asp Ile Tyr Asn
465 470 475 480

Gln Val Lys Gln Ile Ile Glu Glu Gln Ser Gly Ser Tyr Ile Trp Val
485 490 495

Pro Ala Lys Glu Lys Leu
500

<210> 283

<211> 220

<212> PRT

<213> Drosophila melanogaster

<220>

<221> MISC_FEATURE

<222> 64..80, 104..127

<223> Xaa is uncertain

<400> 283

Leu Phe Asn Leu Asp Ser Val Asn Gly Asp Asp Ser Trp Leu Tyr Glu
1 5 10 15

Asp Ile Gln Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile Ala
20 25 30

Gly Gly Thr Asp Asn Pro His Ile Gly Thr Asp Thr Ser Ile Tyr Ile
35 40 45

Thr Lys Leu Ile Ser Gly Gly Ala Ala Ala Ala Asp Gly Arg Leu Xaa
50 55 60

Sequence listing as filed1.txt

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
65 70 75 80

Pro His Ala Ser Ala Val Asp Ala Leu Lys Lys Ala Gly Asn Val Val
85 90 95

Lys Leu His Val Lys Arg Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
100 105 110

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys
115 120 125

Val Ile Glu Ile Asp Leu Val Lys Gly Gly Lys Gly Leu Gly Phe Ser
130 135 140

Ile Ala Gly Gly Ile Gly Asn Gln His Ile Pro Gly Asp Asn Gly Ile
145 150 155 160

Tyr Val Thr Lys Leu Thr Asp Gly Gly Arg Ala Gln Val Asp Gly Arg
165 170 175

Leu Ser Ile Gly Asp Lys Leu Ile Ala Val Arg Thr Asn Gly Ser Glu
180 185 190

Lys Asn Leu Glu Asn Val Thr His Glu Leu Ala Val Ala Thr Leu Lys
195 200 205

Ser Ile Thr Asp Lys Val Thr Leu Ile Ile Gly Lys
210 215 220

<210> 284

<211> 204

<212> PRT

<213> Homo sapiens

<400> 284

Leu Val Asn Thr Asp Ser Leu Glu Thr Pro Thr Tyr Val Asn Gly Thr
1 5 10 15

Asp Ala Asp Tyr Glu Tyr Glu Glu Ile Thr Leu Glu Arg Gly Asn Ser
20 25 30

Gly Leu Gly Phe Ser Ile Ala Gly Gly Thr Asp Asn Pro His Ile Gly
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Sequence listing as filed1.txt

35

40

45

Asp Asp Ser Ser Ile Phe Ile Thr Lys Ile Ile Thr Gly Gly Ala Ala
50 55 60

Ala Gln Asp Gly Arg Leu Arg Val Asn Asp Cys Ile Leu Gln Val Asn
65 70 75 80

Glu Val Asp Val Arg Asp Val Thr His Ser Lys Ala Val Glu Ala Leu
85 90 95

Lys Glu Ala Gly Ser Ile Val Arg Leu Tyr Val Lys Arg Arg Lys Pro
100 105 110

Val Ser Glu Lys Ile Met Glu Ile Lys Leu Ile Lys Gly Pro Lys Gly
115 120 125

Leu Gly Phe Ser Ile Ala Gly Gly Val Gly Asn Gln His Ile Pro Gly
130 135 140

Asp Asn Ser Ile Tyr Val Thr Lys Ile Ile Glu Gly Gly Ala Ala His
145 150 155 160

Lys Asp Gly Lys Leu Gln Ile Gly Asp Lys Leu Leu Ala Val Asn Asn
165 170 175

Val Cys Leu Glu Glu Val Thr His Glu Glu Ala Val Thr Ala Leu Lys
180 185 190

Asn Thr Ser Asp Phe Val Tyr Leu Lys Val Ala Lys
195 200

<210> 285

<211> 201

<212> PRT

<213> Drosophila melanogaster

<220>

<221> MISC_FEATURE

<222> 48..64, 88..111

<223> Xaa is uncertain

Sequence listing as filed1.txt

<400> 285

```

Asp Ile Gln Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile Ala
1      5      10     15
Gly Gly Thr Asp Asn Pro His Ile Gly Thr Asp Thr Ser Ile Tyr Ile
20     25     30
Thr Lys Leu Ile Ser Gly Gly Ala Ala Ala Ala Asp Gly Arg Leu Xaa
35     40     45
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
50     55     60
Pro His Ala Ser Ala Val Asp Ala Leu Lys Lys Ala Gly Asn Val Val
65     70     75     80
Lys Leu His Val Lys Arg Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
85     90     95
Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys
100    105    110
Val Ile Glu Ile Asp Leu Val Lys Gly Gly Lys Gly Leu Gly Phe Ser
115    120    125
Ile Ala Gly Gly Ile Gly Asn Gln His Ile Pro Gly Asp Asn Gly Ile
130    135    140
Tyr Val Thr Lys Leu Thr Asp Gly Gly Arg Ala Gln Val Asp Gly Arg
145    150    155    160
Leu Ser Ile Gly Asp Lys Leu Ile Ala Val Arg Thr Asn Gly Ser Glu
165    170    175
Lys Asn Leu Glu Asn Val Thr His Glu Leu Ala Val Ala Thr Leu Lys
180    185    190
Ser Ile Thr Asp Lys Val Thr Leu Ile
195    200

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<210> 286

<211> 224

<212> PRT

<213> Homo sapiens

Sequence listing as filed1.txt

<400> 286

```

Glu Ile Lys Leu Ile Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala
1           5           10           15

Gly Gly Val Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr Val
20           25           30

Thr Lys Ile Ile Glu Gly Gly Ala Ala His Lys Asp Gly Lys Leu Gln
35           40           45

Ile Gly Asp Lys Leu Leu Ala Val Asn Asn Val Cys Leu Glu Glu Val
50           55           60

Thr His Glu Glu Ala Val Thr Ala Leu Lys Asn Thr Ser Asp Phe Val
65           70           75           80

Tyr Leu Lys Val Ala Lys Pro Thr Ser Met Tyr Met Asn Asp Gly Tyr
85           90           95

Ala Pro Pro Asp Ile Thr Asn Ser Ser Ser Gln Pro Val Asp Asn His
100          105          110

Val Ser Pro Ser Ser Phe Leu Gly Gln Thr Pro Ala Ser Pro Ala Arg
115          120          125

Tyr Ser Pro Val Ser Lys Ala Val Leu Gly Asp Asp Glu Ile Thr Arg
130          135          140

Glu Pro Arg Lys Val Val Leu His Arg Gly Ser Thr Gly Leu Gly Phe
145          150          155          160

Asn Ile Val Gly Gly Glu Asp Gly Glu Gly Ile Phe Ile Ser Phe Ile
165          170          175

Leu Ala Gly Gly Pro Ala Asp Leu Ser Gly Glu Leu Arg Lys Gly Asp
180          185          190

Arg Ile Ile Ser Val Asn Ser Val Asp Leu Arg Ala Ala Ser His Glu
195          200          205

Gln Ala Ala Ala Ala Leu Lys Asn Ala Gly Gln Ala Val Thr Ile Val
210          215          220

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<210> 287

<211> 135

Sequence listing as filed1.txt

<212> PRT

<213> Drosophila melanogaster

<400> 287

Met Pro Ala Leu Pro Val Glu Ser Asn Gln Thr Asn Asn Arg Ser Gln
1 5 10 15

Ser Pro Gln Pro Arg Gln Pro Gly Ser Arg Tyr Ala Ser Thr Asn Val
20 25 30

Leu Ala Ala Val Pro Pro Gly Thr Pro Arg Ala Val Ser Thr Glu Asp
35 40 45

Ile Thr Arg Glu Pro Arg Thr Ile Thr Ile Gln Lys Gly Pro Gln Gly
50 55 60

Leu Gly Phe Asn Ile Val Gly Gly Glu Asp Gly Gln Gly Ile Tyr Val
65 70 75 80

Ser Phe Ile Leu Ala Gly Gly Pro Ala Asp Leu Gly Ser Glu Leu Lys
85 90 95

Arg Gly Asp Gln Leu Leu Ser Val Asn Asn Val Asn Leu Thr His Ala
100 105 110

Thr His Glu Glu Ala Ala Gln Ala Leu Lys Thr Ser Gly Gly Val Val
115 120 125

Thr Leu Leu Ala Gln Tyr Arg
130 135

<210> 288

<211> 135

<212> PRT

<213> Homo sapiens

<400> 288

Ile Pro Val Leu Pro Val Pro Ala Glu Asn Thr Val Ile Leu Pro Thr
1 5 10 15

Ile Pro Gln Ala Asn Pro Pro Pro Val Leu Val Asn Thr Asp Ser Leu
20 25 30

Sequence listing as filed1.txt

Glu Thr Pro Thr Tyr Val Asn Gly Thr Asp Ala Asp Tyr Glu Tyr Glu
35 40 45

Glu Ile Thr Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile Ala
50 55 60

Gly Gly Thr Asp Asn Pro His Ile Gly Asp Asp Ser Ser Ile Phe Ile
65 70 75 80

Thr Lys Ile Ile Thr Gly Gly Ala Ala Ala Gln Asp Gly Arg Leu Arg
85 90 95

Val Asn Asp Cys Ile Leu Gln Val Asn Glu Val Asp Val Arg Asp Val
100 105 110

Thr His Ser Lys Ala Val Glu Ala Leu Lys Glu Ala Gly Ser Ile Val
115 120 125

Arg Leu Tyr Val Lys Arg Arg
130 135

<210> 289

<211> 75

<212> PRT

<213> Drosophila melanogaster

<400> 289

Ile Thr Ile Gln Lys Gly Pro Gln Gly Leu Gly Phe Asn Ile Val Gly
1 5 10 15

Gly Glu Asp Gly Gln Gly Ile Tyr Val Ser Phe Ile Leu Ala Gly Gly
20 25 30

Pro Ala Asp Leu Gly Ser Glu Leu Lys Arg Gly Asp Gln Leu Leu Ser
35 40 45

Val Asn Asn Val Asn Leu Thr His Ala Thr His Glu Glu Ala Ala Gln
50 55 60

Ala Leu Lys Thr Ser Gly Gly Val Val Thr Leu
65 70 75

<210> 290

Sequence listing as filed1.txt

<211> 81

<212> PRT

<213> Homo sapiens

<400> 290

Ile Lys Leu Ile Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala Gly
1 5 10 15

Gly Val Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr Val Thr
20 25 30

Lys Ile Ile Glu Gly Gly Ala Ala His Lys Asp Gly Lys Leu Gln Ile
35 40 45

Gly Asp Lys Leu Leu Ala Val Asn Asn Val Cys Leu Glu Glu Val Thr
50 55 60

His Glu Glu Ala Val Thr Ala Leu Lys Asn Thr Ser Asp Phe Val Tyr
65 70 75 80

Leu

<210> 291

<211> 523

<212> PRT

<213> Drosophila melanogaster

<220>

<221> MISC_FEATURE

<222> 147..161, 302..318

<223> Xaa is uncertain

<400> 291

Glu Ser Asn Gln Thr Asn Asn Arg Ser Gln Ser Pro Gln Pro Arg Gln
1 5 10 15

Pro Gly Ser Arg Tyr Ala Ser Thr Asn Val Leu Ala Ala Val Pro Pro
20 25 30

Sequence listing as filed1.txt

Gly Thr Pro Arg Ala Val Ser Thr Glu Asp Ile Thr Arg Glu Pro Arg
35 40 45

Thr Ile Thr Ile Gln Lys Gly Pro Gln Gly Leu Gly Phe Asn Ile Val
50 55 60

Gly Gly Glu Asp Gly Gln Gly Ile Tyr Val Ser Phe Ile Leu Ala Gly
65 70 75 80

Gly Pro Ala Asp Leu Gly Ser Glu Leu Lys Arg Gly Asp Gln Leu Leu
85 90 95

Ser Val Asn Asn Val Asn Leu Thr His Ala Thr His Glu Glu Ala Ala
100 105 110

Gln Ala Leu Lys Thr Ser Gly Gly Val Val Thr Leu Leu Ala Gln Tyr
115 120 125

Arg Pro Glu Glu Tyr Asn Arg Phe Glu Ala Arg Ile Gln Glu Leu Lys
130 135 140

Gln Gln Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
145 150 155 160

Xaa Gln Lys Arg Ser Leu Tyr Val Arg Ala Leu Phe Asp Tyr Asp Pro
165 170 175

Asn Arg Asp Asp Gly Leu Pro Ser Arg Gly Leu Pro Phe Lys His Gly
180 185 190

Asp Ile Leu His Val Thr Asn Ala Ser Asp Asp Glu Trp Trp Gln Ala
195 200 205

Arg Arg Val Leu Gly Asp Asn Glu Asp Glu Gln Ile Gly Ile Val Pro
210 215 220

Ser Lys Arg Arg Trp Glu Arg Lys Met Arg Ala Arg Asp Arg Ser Val
225 230 235 240

Lys Phe Gln Gly His Ala Ala Ala Asn Asn Asn Leu Asp Lys Gln Ser
245 250 255

Thr Leu Asp Arg Lys Lys Lys Asn Phe Thr Phe Ser Arg Lys Phe Pro
260 265 270

Phe Met Lys Ser Arg Asp Glu Lys Asn Glu Asp Gly Ser Asp Gln Glu
275 280 285

Sequence listing as filed1.txt

Pro Asn Gly Val Val Ser Ser Thr Ser Glu Ile Asp Ile Xaa Xaa Xaa
290 295 300

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Val Leu
305 310 315 320

Ser Tyr Glu Ala Val Gln Arg Leu Ser Ile Asn Tyr Thr Arg Pro Val
325 330 335

Ile Ile Leu Gly Pro Leu Lys Asp Arg Ile Asn Asp Asp Leu Ile Ser
340 345 350

Glu Tyr Pro Asp Lys Phe Gly Ser Cys Val Pro His Thr Thr Arg Pro
355 360 365

Lys Arg Glu Tyr Glu Val Asp Gly Arg Asp Tyr His Phe Val Ser Ser
370 375 380

Arg Glu Gln Met Glu Arg Asp Ile Gln Asn His Leu Phe Ile Glu Ala
385 390 395 400

Gly Gln Tyr Asn Asp Asn Leu Tyr Gly Thr Ser Val Ala Ser Val Arg
405 410 415

Glu Val Ala Glu Lys Gly Lys His Cys Ile Leu Asp Val Ser Gly Asn
420 425 430

Ala Ile Lys Arg Leu Gln Val Ala Gln Leu Tyr Pro Val Ala Val Phe
435 440 445

Ile Lys Pro Lys Ser Val Asp Ser Val Met Glu Met Asn Arg Arg Met
450 455 460

Thr Glu Glu Gln Ala Lys Lys Thr Tyr Glu Arg Ala Ile Lys Met Glu
465 470 475 480

Gln Glu Phe Gly Glu Tyr Phe Thr Gly Val Val Gln Gly Asp Thr Ile
485 490 495

Glu Glu Ile Tyr Ser Lys Val Lys Ser Met Ile Trp Ser Gln Ser Gly
500 505 510

Pro Thr Ile Trp Val Pro Ser Lys Glu Ser Leu
515 520

<210> 292

Sequence listing as filed1.txt

<211> 482

<212> PRT

<213> Homo sapiens

<400> 292

Asp Ser Glu Met Thr Ser His Ser Gln His Ser Thr Ala Thr Arg Gln
1 5 10 15

Pro Ser Met Thr Leu Gln Arg Ala Val Ser Leu Glu Gly Glu Pro Arg
20 25 30

Lys Val Val Leu His Lys Gly Ser Thr Gly Leu Gly Phe Asn Ile Val
35 40 45

Gly Gly Glu Asp Gly Glu Gly Ile Phe Val Ser Phe Ile Leu Ala Gly
50 55 60

Gly Pro Ala Asp Leu Ser Gly Glu Leu Gln Arg Gly Asp Gln Ile Leu
65 70 75 80

Ser Val Asn Gly Ile Asp Leu Arg Gly Ala Ser His Glu Gln Ala Ala
85 90 95

Ala Ala Leu Lys Gly Ala Gly Gln Thr Val Thr Ile Ile Ala Gln Tyr
100 105 110

Gln Pro Glu Asp Tyr Ala Arg Phe Glu Ala Lys Ile His Asp Leu Arg
115 120 125

Glu Gln Met Met Asn His Ser Met Ser Ser Gly Ser Gly Ser Leu Arg
130 135 140

Thr Asn Gln Lys Arg Ser Leu Tyr Val Arg Ala Met Phe Asp Tyr Asp
145 150 155 160

Lys Ser Lys Asp Ser Gly Leu Pro Ser Gln Gly Leu Ser Phe Lys Tyr
165 170 175

Gly Asp Ile Leu His Val Ile Asn Ala Ser Asp Asp Glu Trp Trp Gln
180 185 190

Ala Arg Arg Val Met Leu Glu Gly Asp Ser Glu Glu Met Gly Val Ile
195 200 205

Sequence listing as filed1.txt

Pro Ser Lys Arg Arg Val Glu Arg Lys Glu Arg Ala Arg Leu Lys Thr
210 215 220

Val Lys Phe Asn Ala Lys Pro Gly Val Ile Asp Ser Lys Gly Ser Phe
225 230 235 240

Asn Asp Lys Arg Lys Lys Ser Phe Ile Phe Ser Arg Lys Phe Pro Phe
245 250 255

Tyr Lys Asn Lys Glu Gln Ser Glu Gln Glu Thr Ser Asp Pro Glu Arg
260 265 270

Gly Gln Glu Asp Leu Ile Leu Ser Tyr Glu Pro Val Thr Arg Gln Glu
275 280 285

Ile Asn Tyr Thr Arg Pro Val Ile Ile Leu Gly Pro Met Lys Asp Arg
290 295 300

Ile Asn Asp Asp Leu Ile Ser Glu Phe Pro Asp Lys Phe Gly Ser Cys
305 310 315 320

Val Pro His Thr Thr Arg Pro Lys Arg Asp Tyr Glu Val Asp Gly Arg
325 330 335

Asp Tyr His Phe Val Ile Ser Arg Glu Gln Met Glu Lys Asp Ile Gln
340 345 350

Glu His Lys Phe Ile Glu Ala Gly Gln Tyr Asn Asp Asn Leu Tyr Gly
355 360 365

Thr Ser Val Gln Ser Val Arg Phe Val Ala Glu Arg Gly Lys His Cys
370 375 380

Ile Leu Asp Val Ser Gly Asn Ala Ile Lys Arg Leu Gln Val Ala Gln
385 390 395 400

Leu Tyr Pro Ile Ala Ile Phe Ile Lys Pro Arg Ser Leu Glu Ser Leu
405 410 415

Met Glu Met Asn Lys Arg Leu Thr Glu Glu Gln Ala Lys Lys Thr Tyr
420 425 430

Asp Arg Ala Ile Lys Leu Glu Gln Glu Phe Gly Glu Tyr Phe Thr Ala
435 440 445

Ile Val Gln Gly Asp Thr Leu Glu Asp Ile Tyr Asn Gln Cys Lys Leu
450 455 460

Sequence listing as filed1.txt

Val Ile Glu Glu Gln Ser Gly Pro Phe Ile Trp Ile Pro Ser Lys Glu
465 470 475 480

Lys Leu

<210> 293

<211> 220

<212> PRT

<213> Drosophila melanogaster

<220>

<221> MISC_FEATURE

<222> 65..81, 105..128

<223> Xaa is uncertain

<400> 293

Ser Leu Phe Asn Leu Asp Ser Val Asn Gly Asp Asp Ser Trp Leu Tyr
1 5 10 15

Glu Asp Ile Gln Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile
20 25 30

Ala Gly Gly Thr Asp Asn Pro His Ile Gly Thr Asp Thr Ser Ile Tyr
35 40 45

Ile Thr Lys Leu Ile Ser Gly Gly Ala Ala Ala Ala Asp Gly Arg Leu
50 55 60

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
65 70 75 80

Xaa Pro His Ala Ser Ala Val Asp Ala Leu Lys Lys Ala Gly Asn Val
85 90 95

Val Lys Leu His Val Lys Arg Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
100 105 110

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
115 120 125

Sequence listing as filed1.txt

Lys Val Ile Glu Ile Asp Leu Val Lys Gly Gly Lys Gly Leu Gly Phe
130 135 140

Ser Ile Ala Gly Gly Ile Gly Asn Gln His Ile Pro Gly Asp Asn Gly
145 150 155 160

Ile Tyr Val Thr Lys Leu Thr Asp Gly Gly Arg Ala Gln Val Asp Gly
165 170 175

Arg Leu Ser Ile Gly Asp Lys Leu Ile Ala Val Arg Thr Asn Gly Ser
180 185 190

Glu Lys Asn Leu Glu Asn Val Thr His Glu Leu Ala Val Ala Thr Leu
195 200 205

Lys Ser Ile Thr Asp Lys Val Thr Leu Ile Ile Gly
210 215 220

<210> 294

<211> 198

<212> PRT

<213> Homo sapiens

<400> 294

Thr Leu Asp Thr Ile Pro Tyr Val Asn Gly Thr Glu Ile Glu Tyr Glu
1 5 10 15

Phe Glu Glu Ile Thr Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser
20 25 30

Ile Ala Gly Gly Thr Asp Asn Pro His Ile Gly Asp Asp Pro Gly Ile
35 40 45

Phe Ile Thr Lys Ile Ile Pro Gly Gly Ala Ala Ala Glu Asp Gly Arg
50 55 60

Leu Arg Val Asn Asp Cys Ile Leu Arg Val Asn Glu Val Asp Val Ser
65 70 75 80

Glu Val Ser His Ser Lys Ala Val Glu Ala Leu Lys Glu Ala Gly Ser
85 90 95

Ile Ala Arg Leu Tyr Val Arg Arg Arg Arg Pro Ile Leu Glu Thr Val
100 105 110

Sequence listing as filed1.txt

Val Glu Ile Lys Leu Phe Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile
115 120 125

Ala Gly Gly Val Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr
130 135 140

Val Thr Lys Ile Ile Asp Gly Gly Ala Ala Gln Lys Asp Gly Arg Leu
145 150 155 160

Gln Val Gly Asp Arg Leu Leu Met Val Asn Asn Tyr Ser Leu Glu Glu
165 170 175

Val Thr His Glu Glu Ala Val Ala Ile Leu Lys Asn Thr Ser Glu Val
180 185 190

Val Tyr Leu Lys Val Gly
195

<210> 295

<211> 119

<212> PRT

<213> Drosophila melanogaster

<400> 295

Ser Pro Gln Pro Arg Gln Pro Gly Ser Arg Tyr Ala Ser Thr Asn Val
1 5 10 15

Leu Ala Ala Val Pro Pro Gly Thr Pro Arg Ala Val Ser Thr Glu Asp
20 25 30

Ile Thr Arg Glu Pro Arg Thr Ile Thr Ile Gln Lys Gly Pro Gln Gly
35 40 45

Leu Gly Phe Asn Ile Val Gly Gly Glu Asp Gly Gln Gly Ile Tyr Val
50 55 60

Ser Phe Ile Leu Ala Gly Gly Pro Ala Asp Leu Gly Ser Glu Leu Lys
65 70 75 80

Arg Gly Asp Gln Leu Leu Ser Val Asn Asn Val Asn Leu Thr His Ala
85 90 95

Thr His Glu Glu Ala Ala Gln Ala Leu Lys Thr Ser Gly Gly Val Val
100 105 110

Sequence listing as filed1.txt

Thr Leu Leu Ala Gln Tyr Arg
115

<210> 296

<211> 120

<212> PRT

<213> Homo sapiens

<400> 296

Ser Pro Leu Lys Ala Ser Pro Ala Pro Ile Ile Val Asn Thr Asp Thr
1 5 10 15

Leu Asp Thr Ile Pro Tyr Val Asn Gly Thr Glu Ile Glu Tyr Glu Phe
20 25 30

Glu Glu Ile Thr Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile
35 40 45

Ala Gly Gly Thr Asp Asn Pro His Ile Gly Asp Asp Pro Gly Ile Phe
50 55 60

Ile Thr Lys Ile Ile Pro Gly Gly Ala Ala Ala Glu Asp Gly Arg Leu
65 70 75 80

Arg Val Asn Asp Cys Ile Leu Arg Val Asn Glu Val Asp Val Ser Glu
85 90 95

Val Ser His Ser Lys Ala Val Glu Ala Leu Lys Glu Ala Gly Ser Ile
100 105 110

Ala Arg Leu Tyr Val Arg Arg Arg
115 120

<210> 297

<211> 75

<212> PRT

<213> Drosophila melanogaster

<400> 297

Ile Thr Ile Gln Lys Gly Pro Gln Gly Leu Gly Phe Asn Ile Val Gly
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Sequence listing as filed1.txt

1 5 10 15
 Gly Glu Asp Gly Gln Gly Ile Tyr Val Ser Phe Ile Leu Ala Gly Gly
 20 25 30
 Pro Ala Asp Leu Gly Ser Glu Leu Lys Arg Gly Asp Gln Leu Leu Ser
 35 40 45
 Val Asn Asn Val Asn Leu Thr His Ala Thr His Glu Glu Ala Ala Gln
 50 55 60
 Ala Leu Lys Thr Ser Gly Gly Val Val Thr Leu
 65 70 75

<210> 298
 <211> 81
 <212> PRT
 <213> Homo sapiens

<400> 298
 Ile Lys Leu Phe Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala Gly
 1 5 10 15
 Gly Val Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr Val Thr
 20 25 30
 Lys Ile Ile Asp Gly Gly Ala Ala Gln Lys Asp Gly Arg Leu Gln Val
 35 40 45
 Gly Asp Arg Leu Leu Met Val Asn Asn Tyr Ser Leu Glu Glu Val Thr
 50 55 60
 His Glu Glu Ala Val Ala Ile Leu Lys Asn Thr Ser Glu Val Val Tyr
 65 70 75 80

Leu

<210> 299
 <211> 87
 <212> PRT
 <213> Drosophila melanogaster

Sequence listing as filed1.txt

<400> 299

Glu Ile Asp Leu Val Lys Gly Gly Lys Gly Leu Gly Phe Ser Ile Ala
1 5 10 15

Gly Gly Ile Gly Asn Gln His Ile Pro Gly Asp Asn Gly Ile Tyr Val
20 25 30

Thr Lys Leu Thr Asp Gly Gly Arg Ala Gln Val Asp Gly Arg Leu Ser
35 40 45

Ile Gly Asp Lys Leu Ile Ala Val Arg Thr Asn Gly Ser Glu Lys Asn
50 55 60

Leu Glu Asn Val Thr His Glu Leu Ala Val Ala Thr Leu Lys Ser Ile
65 70 75 80

Thr Asp Lys Val Thr Leu Ile
85

<210> 300

<211> 77

<212> PRT

<213> Homo sapiens

<400> 300

Lys Val Val Leu His Lys Gly Ser Thr Gly Leu Gly Phe Asn Ile Val
1 5 10 15

Gly Gly Glu Asp Gly Glu Gly Ile Phe Val Ser Phe Ile Leu Ala Gly
20 25 30

Gly Pro Ala Asp Leu Ser Gly Glu Leu Gln Arg Gly Asp Gln Ile Leu
35 40 45

Ser Val Asn Gly Ile Asp Leu Arg Gly Ala Ser His Glu Gln Ala Ala
50 55 60

Ala Ala Leu Lys Gly Ala Gly Gln Thr Val Thr Ile Ile
65 70 75

<210> 301

<211> 81

Sequence listing as filed1.txt

<212> PRT

<213> Drosophila melanogaster

<220>

<221> MISC_FEATURE

<222> 47..63

<223> Xaa is uncertain

<400> 301

Ile Gln Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile Ala Gly
1 5 10 15

Gly Thr Asp Asn Pro His Ile Gly Thr Asp Thr Ser Ile Tyr Ile Thr
20 25 30

Lys Leu Ile Ser Gly Gly Ala Ala Ala Asp Gly Arg Leu Xaa Xaa
35 40 45

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro
50 55 60

His Ala Ser Ala Val Asp Ala Leu Lys Lys Ala Gly Asn Val Val Lys
65 70 75 80

Leu

<210> 302

<211> 75

<212> PRT

<213> Homo sapiens

<400> 302

Val Val Leu His Lys Gly Ser Thr Gly Leu Gly Phe Asn Ile Val Gly
1 5 10 15

Gly Glu Asp Gly Glu Gly Ile Phe Val Ser Phe Ile Leu Ala Gly Gly
20 25 30

Pro Ala Asp Leu Ser Gly Glu Leu Gln Arg Gly Asp Gln Ile Leu Ser
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Sequence listing as filed1.txt

35

40

45

Val Asn Gly Ile Asp Leu Arg Gly Ala Ser His Glu Gln Ala Ala Ala
50 55 60

Ala Leu Lys Gly Ala Gly Gln Thr Val Thr Ile
65 70 75

<210> 303

<211> 870

<212> PRT

<213> Homo sapiens

<400> 303

Met Phe Phe Ala Cys Tyr Cys Ala Leu Arg Thr Asn Val Lys Lys Tyr
1 5 10 15

Arg Tyr Gln Asp Glu Asp Ala Pro His Asp His Ser Leu Pro Arg Leu
20 25 30

Thr His Glu Val Arg Gly Pro Glu Leu Val His Val Ser Glu Lys Asn
35 40 45

Leu Ser Gln Ile Glu Asn Val His Gly Tyr Val Leu Gln Ser His Ile
50 55 60

Ser Pro Leu Lys Ala Ser Pro Ala Pro Ile Ile Val Asn Thr Asp Thr
65 70 75 80

Leu Asp Thr Ile Pro Tyr Val Asn Gly Thr Glu Ile Glu Tyr Glu Phe
85 90 95

Glu Glu Ile Thr Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile
100 105 110

Ala Gly Gly Thr Asp Asn Pro His Ile Gly Asp Asp Pro Gly Ile Phe
115 120 125

Ile Thr Lys Ile Ile Pro Gly Gly Ala Ala Ala Glu Asp Gly Arg Leu
130 135 140

Arg Val Asn Asp Cys Ile Leu Arg Val Asn Glu Val Asp Val Ser Glu
145 150 155 160

Sequence listing as filed1.txt

Val Ser His Ser Lys Ala Val Glu Ala Leu Lys Glu Ala Gly Ser Ile
165 170 175

Ala Arg Leu Tyr Val Arg Arg Arg Arg Pro Ile Leu Glu Thr Val Val
180 185 190

Glu Ile Lys Leu Phe Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala
195 200 205

Gly Gly Val Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr Val
210 215 220

Thr Lys Ile Ile Asp Gly Gly Ala Ala Gln Lys Asp Gly Arg Leu Gln
225 230 235 240

Val Gly Asp Arg Leu Leu Met Val Asn Asn Tyr Ser Leu Glu Glu Val
245 250 255

Thr His Glu Glu Ala Val Ala Ile Leu Lys Asn Thr Ser Glu Val Val
260 265 270

Tyr Leu Lys Val Gly Asn Pro Thr Thr Ile Tyr Met Thr Asp Pro Tyr
275 280 285

Gly Pro Pro Asp Ile Thr His Ser Tyr Ser Pro Pro Met Glu Asn His
290 295 300

Leu Leu Ser Gly Asn Asn Gly Thr Leu Glu Tyr Lys Thr Ser Leu Pro
305 310 315 320

Pro Ile Ser Pro Gly Arg Tyr Ser Pro Ile Pro Lys His Met Leu Val
325 330 335

Asp Asp Asp Tyr Thr Arg Pro Pro Glu Pro Val Tyr Ser Thr Val Asn
340 345 350

Lys Leu Cys Asp Lys Pro Ala Ser Pro Arg His Tyr Ser Pro Val Glu
355 360 365

Cys Asp Lys Ser Phe Leu Leu Ser Ala Pro Tyr Ser His Tyr His Leu
370 375 380

Gly Leu Leu Pro Asp Ser Glu Met Thr Ser His Ser Gln His Ser Thr
385 390 395 400

Ala Thr Arg Gln Pro Ser Met Thr Leu Gln Arg Ala Val Ser Leu Glu
405 410 415

Sequence listing as filed1.txt

Gly Glu Pro Arg Lys Val Val Leu His Lys Gly Ser Thr Gly Leu Gly
420 425 430

Phe Asn Ile Val Gly Gly Glu Asp Gly Glu Gly Ile Phe Val Ser Phe
435 440 445

Ile Leu Ala Gly Gly Pro Ala Asp Leu Ser Gly Glu Leu Gln Arg Gly
450 455 460

Asp Gln Ile Leu Ser Val Asn Gly Ile Asp Leu Arg Gly Ala Ser His
465 470 475 480

Glu Gln Ala Ala Ala Leu Lys Gly Ala Gly Gln Thr Val Thr Ile
485 490 495

Ile Ala Gln Tyr Gln Pro Glu Asp Tyr Ala Arg Phe Glu Ala Lys Ile
500 505 510

His Asp Leu Arg Glu Gln Met Met Asn His Ser Met Ser Ser Gly Ser
515 520 525

Gly Ser Leu Arg Thr Asn Gln Lys Arg Ser Leu Tyr Val Arg Ala Met
530 535 540

Phe Asp Tyr Asp Lys Ser Lys Asp Ser Gly Leu Pro Ser Gln Gly Leu
545 550 555 560

Ser Phe Lys Tyr Gly Asp Ile Leu His Val Ile Asn Ala Ser Asp Asp
565 570 575

Glu Trp Trp Gln Ala Arg Arg Val Met Leu Glu Gly Asp Ser Glu Glu
580 585 590

Met Gly Val Ile Pro Ser Lys Arg Arg Val Glu Arg Lys Glu Arg Ala
595 600 605

Arg Leu Lys Thr Val Lys Phe Asn Ala Lys Pro Gly Val Ile Asp Ser
610 615 620

Lys Gly Ser Phe Asn Asp Lys Arg Lys Lys Ser Phe Ile Phe Ser Arg
625 630 635 640

Lys Phe Pro Phe Tyr Lys Asn Lys Glu Gln Ser Glu Gln Glu Thr Ser
645 650 655

Asp Pro Glu Arg Gly Gln Glu Asp Leu Ile Leu Ser Tyr Glu Pro Val
660 665 670

Sequence listing as filed1.txt

Thr Arg Gln Glu Ile Asn Tyr Thr Arg Pro Val Ile Ile Leu Gly Pro
675 680 685

Met Lys Asp Arg Ile Asn Asp Asp Leu Ile Ser Glu Phe Pro Asp Lys
690 695 700

Phe Gly Ser Cys Val Pro His Thr Thr Arg Pro Lys Arg Asp Tyr Glu
705 710 715 720

Val Asp Gly Arg Asp Tyr His Phe Val Ile Ser Arg Glu Gln Met Glu
725 730 735

Lys Asp Ile Gln Glu His Lys Phe Ile Glu Ala Gly Gln Tyr Asn Asp
740 745 750

Asn Leu Tyr Gly Thr Ser Val Gln Ser Val Arg Phe Val Ala Glu Arg
755 760 765

Gly Lys His Cys Ile Leu Asp Val Ser Gly Asn Ala Ile Lys Arg Leu
770 775 780

Gln Val Ala Gln Leu Tyr Pro Ile Ala Ile Phe Ile Lys Pro Arg Ser
785 790 795 800

Leu Glu Ser Leu Met Glu Met Asn Lys Arg Leu Thr Glu Glu Gln Ala
805 810 815

Lys Lys Thr Tyr Asp Arg Ala Ile Lys Leu Glu Gln Glu Phe Gly Glu
820 825 830

Tyr Phe Thr Ala Ile Val Gln Gly Asp Thr Leu Glu Asp Ile Tyr Asn
835 840 845

Gln Cys Lys Leu Val Ile Glu Glu Gln Ser Gly Pro Phe Ile Trp Ile
850 855 860

Pro Ser Lys Glu Lys Leu
865 870

<210> 304

<211> 767

<212> PRT

<213> Homo sapiens

Sequence listing as filed1.txt

<400> 304

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Met Ser Gln Arg Pro Arg Ala Pro Arg Ser Ala Leu Trp Leu Leu Ala
1      5      10      15

Pro Pro Leu Leu Arg Trp Ala Pro Pro Leu Leu Thr Val Leu His Ser
20     25     30

Asp Leu Phe Gln Ala Leu Leu Asp Ile Leu Asp Tyr Tyr Glu Ala Ser
35     40     45

Leu Ser Glu Ser Gln Lys Tyr Arg Tyr Gln Asp Glu Asp Thr Pro Pro
50     55     60

Leu Glu His Ser Pro Ala His Leu Pro Asn Gln Ala Asn Ser Pro Pro
65     70     75     80

Val Ile Val Asn Thr Asp Thr Leu Glu Ala Pro Gly Tyr Glu Leu Gln
85     90     95

Val Asn Gly Thr Glu Gly Glu Met Glu Tyr Glu Glu Ile Thr Leu Glu
100    105    110

Arg Gly Asn Ser Gly Leu Gly Phe Ser Ile Ala Gly Gly Thr Asp Asn
115    120    125

Pro His Ile Gly Asp Asp Pro Ser Ile Phe Ile Thr Lys Ile Ile Pro
130    135    140

Gly Gly Ala Ala Ala Gln Asp Gly Arg Leu Arg Val Asn Asp Ser Ile
145    150    155    160

Leu Phe Val Asn Glu Val Asp Val Arg Glu Val Thr His Ser Ala Ala
165    170    175

Val Glu Ala Leu Lys Glu Ala Gly Ser Ile Val Arg Leu Tyr Val Met
180    185    190

Arg Arg Lys Pro Pro Ala Glu Lys Val Met Glu Ile Lys Leu Ile Lys
195    200    205

Gly Pro Lys Gly Leu Gly Phe Ser Ile Ala Gly Gly Val Gly Asn Gln
210    215    220

His Ile Pro Gly Asp Asn Ser Ile Tyr Val Thr Lys Ile Ile Glu Gly
225    230    235    240

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Sequence listing as filed1.txt

Gly Ala Ala His Lys Asp Gly Arg Leu Gln Ile Gly Asp Lys Ile Leu
245 250 255

Ala Val Asn Ser Val Gly Leu Glu Asp Val Met His Glu Asp Ala Val
260 265 270

Ala Ala Leu Lys Asn Thr Tyr Asp Val Val Tyr Leu Lys Val Ala Lys
275 280 285

Pro Ser Asn Ala Tyr Leu Ser Asp Ser Tyr Ala Pro Pro Asp Ile Thr
290 295 300

Thr Ser Tyr Ser Gln His Leu Asp Asn Glu Ile Ser His Ser Ser Tyr
305 310 315 320

Leu Gly Thr Asp Tyr Pro Thr Ala Met Thr Pro Thr Ser Pro Arg Arg
325 330 335

Tyr Ser Pro Val Ala Lys Asp Leu Leu Gly Glu Glu Asp Ile Pro Arg
340 345 350

Glu Pro Arg Arg Ile Val Ile His Arg Gly Ser Thr Gly Leu Gly Phe
355 360 365

Asn Ile Val Gly Gly Glu Asp Gly Glu Gly Ile Phe Ile Ser Phe Ile
370 375 380

Leu Ala Gly Gly Pro Ala Asp Leu Ser Gly Glu Leu Arg Lys Gly Asp
385 390 395 400

Gln Ile Leu Ser Val Asn Gly Val Asp Leu Arg Asn Ala Ser His Glu
405 410 415

Gln Ala Ala Ile Ala Leu Lys Asn Ala Gly Gln Thr Val Thr Ile Ile
420 425 430

Ala Gln Tyr Lys Pro Glu Glu Tyr Ser Arg Phe Glu Ala Lys Ile His
435 440 445

Asp Leu Arg Glu Gln Leu Met Asn Ser Ser Leu Gly Ser Gly Thr Ala
450 455 460

Ser Leu Arg Ser Asn Pro Lys Arg Gly Phe Tyr Ile Arg Ala Leu Phe
465 470 475 480

Asp Tyr Asp Lys Thr Lys Asp Cys Gly Phe Leu Ser Gln Ala Leu Ser
485 490 495

Sequence listing as filed1.txt

Phe Arg Phe Gly Asp Val Leu His Val Ile Asp Ala Ser Asp Glu Glu
 500 505 510
 Trp Trp Gln Ala Arg Arg Val His Ser Asp Ser Glu Thr Asp Asp Ile
 515 520 525
 Gly Phe Ile Pro Ser Lys Arg Arg Val Glu Arg Arg Glu Trp Ser Arg
 530 535 540
 Leu Lys Ala Lys Asp Trp Gly Ser Ser Ser Gly Ser Gln Gly Arg Glu
 545 550 555 560
 Asp Ser Val Leu Ser Tyr Glu Thr Val Thr Gln Met Glu Val His Tyr
 565 570 575
 Ala Arg Pro Ile Ile Ile Leu Gly Pro Thr Lys Asp Arg Ala Asn Asp
 580 585 590
 Asp Leu Leu Ser Glu Phe Pro Asp Lys Phe Gly Ser Cys Val Pro His
 595 600 605
 Thr Thr Arg Pro Lys Arg Glu Tyr Glu Ile Asp Gly Arg Asp Tyr His
 610 615 620
 Phe Val Ser Ser Arg Glu Lys Met Glu Lys Asp Ile Gln Ala His Lys
 625 630 635 640
 Phe Ile Glu Ala Gly Gln Tyr Asn Ser His Leu Tyr Gly Thr Ser Val
 645 650 655
 Gln Ser Val Arg Glu Val Ala Glu Gln Gly Lys His Cys Ile Leu Asp
 660 665 670
 Val Ser Ala Asn Ala Val Arg Arg Leu Gln Ala Ala His Leu His Pro
 675 680 685
 Ile Ala Ile Phe Ile Arg Pro Arg Ser Leu Glu Asn Val Leu Glu Ile
 690 695 700
 Asn Lys Arg Ile Thr Glu Glu Gln Ala Arg Lys Ala Phe Asp Arg Ala
 705 710 715 720
 Thr Lys Leu Glu Gln Glu Phe Thr Glu Cys Phe Ser Ala Ile Val Glu
 725 730 735
 Gly Asp Ser Phe Glu Glu Ile Tyr His Lys Val Lys Arg Val Ile Glu
 740 745 750

Sequence listing as filed1.txt

Asp Leu Ser Gly Pro Tyr Ile Trp Val Pro Ala Arg Glu Arg Leu
755 760 765

<210> 305

<211> 817

<212> PRT

<213> Homo sapiens

<400> 305

Met His Lys His Gln His Cys Cys Lys Cys Pro Glu Cys Tyr Glu Val
1 5 10 15

Thr Arg Leu Ala Ala Leu Arg Arg Leu Glu Pro Pro Gly Tyr Gly Asp
20 25 30

Trp Gln Val Pro Asp Pro Tyr Gly Pro Gly Gly Gly Asn Gly Ala Ser
35 40 45

Ala Gly Tyr Gly Gly Tyr Ser Ser Gln Thr Leu Pro Ser Gln Ala Gly
50 55 60

Ala Thr Pro Thr Pro Arg Thr Lys Ala Lys Leu Ile Pro Thr Gly Arg
65 70 75 80

Asp Val Gly Pro Val Pro Leu Lys Pro Val Pro Gly Lys Ser Thr Pro
85 90 95

Lys Leu Asn Gly Ser Gly Pro Ser Trp Trp Pro Glu Cys Thr Cys Thr
100 105 110

Asn Arg Asp Trp Tyr Glu Gln Val Asn Gly Ser Asp Gly Met Phe Lys
115 120 125

Tyr Glu Glu Ile Val Leu Glu Arg Gly Asn Ser Gly Leu Gly Phe Ser
130 135 140

Ile Ala Gly Gly Ile Asp Asn Pro His Val Pro Asp Asp Pro Gly Ile
145 150 155 160

Phe Ile Thr Lys Ile Ile Pro Gly Gly Ala Ala Ala Met Asp Gly Arg
165 170 175

Leu Gly Val Asn Asp Cys Val Leu Arg Val Asn Glu Val Glu Val Ser
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Sequence listing as filed1.txt

180

185

190

Glu Val Val His Ser Arg Ala Val Glu Ala Leu Lys Glu Ala Gly Pro
195 200 205

Val Val Arg Leu Val Val Arg Arg Arg Gln Pro Pro Pro Glu Thr Ile
210 215 220

Met Glu Val Asn Leu Leu Lys Gly Pro Lys Gly Leu Gly Phe Ser Ile
225 230 235 240

Ala Gly Gly Ile Gly Asn Gln His Ile Pro Gly Asp Asn Ser Ile Tyr
245 250 255

Ile Thr Lys Ile Ile Glu Gly Gly Ala Ala Gln Lys Asp Gly Arg Leu
260 265 270

Gln Ile Gly Asp Arg Leu Leu Ala Val Asn Asn Thr Asn Leu Gln Asp
275 280 285

Val Arg His Glu Glu Ala Val Ala Ser Leu Lys Asn Thr Ser Asp Met
290 295 300

Val Tyr Leu Lys Val Ala Lys Pro Gly Ser Leu His Leu Asn Asp Met
305 310 315 320

Tyr Ala Pro Pro Asp Tyr Ala Ser Thr Phe Thr Ala Leu Ala Asp Asn
325 330 335

His Ile Ser His Asn Ser Ser Leu Gly Tyr Leu Gly Ala Val Glu Ser
340 345 350

Lys Val Ser Tyr Pro Ala Pro Pro Gln Val Pro Pro Thr Arg Tyr Ser
355 360 365

Pro Ile Pro Arg His Met Leu Ala Glu Glu Asp Phe Thr Arg Glu Pro
370 375 380

Arg Lys Ile Ile Leu His Lys Gly Ser Thr Gly Leu Gly Phe Asn Ile
385 390 395 400

Val Gly Gly Glu Asp Gly Glu Gly Ile Phe Val Ser Phe Ile Leu Ala
405 410 415

Gly Gly Pro Ala Asp Leu Ser Gly Glu Leu Arg Arg Gly Asp Arg Ile
420 425 430

Sequence listing as filed1.txt

Leu Ser Val Asn Gly Val Asn Leu Arg Asn Ala Thr His Glu Gln Ala
435 440 445

Ala Ala Ala Leu Lys Arg Ala Gly Gln Ser Val Thr Ile Val Ala Gln
450 455 460

Tyr Arg Pro Glu Glu Tyr Ser Arg Phe Glu Ser Lys Ile His Asp Leu
465 470 475 480

Arg Glu Gln Met Met Asn Ser Ser Met Ser Ser Gly Ser Gly Ser Leu
485 490 495

Arg Thr Ser Glu Lys Arg Ser Leu Tyr Val Arg Ala Leu Phe Asp Tyr
500 505 510

Asp Arg Thr Arg Asp Ser Cys Leu Pro Ser Gln Gly Leu Ser Phe Ser
515 520 525

Tyr Gly Asp Ile Leu His Val Ile Asn Ala Ser Asp Asp Glu Trp Trp
530 535 540

Gln Ala Arg Leu Val Thr Pro His Gly Glu Ser Glu Gln Ile Gly Val
545 550 555 560

Ile Pro Ser Lys Lys Arg Val Glu Lys Lys Glu Arg Ala Arg Leu Lys
565 570 575

Thr Val Lys Phe His Ala Arg Thr Gly Met Ile Glu Ser Asn Arg Asp
580 585 590

Phe Pro Gly Leu Ser Asp Asp Tyr Tyr Gly Ala Lys Asn Leu Lys Gly
595 600 605

Gln Glu Asp Ala Ile Leu Ser Tyr Glu Pro Val Thr Arg Gln Glu Ile
610 615 620

His Tyr Ala Arg Pro Val Ile Ile Leu Gly Pro Met Lys Asp Arg Val
625 630 635 640

Asn Asp Asp Leu Ile Ser Glu Phe Pro His Lys Phe Gly Ser Cys Val
645 650 655

Pro His Thr Thr Arg Pro Arg Arg Asp Asn Glu Val Asp Gly Gln Asp
660 665 670

Tyr His Phe Val Val Ser Arg Glu Gln Met Glu Lys Asp Ile Gln Asp
675 680 685

Sequence listing as filed1.txt

Asn Lys Phe Ile Glu Ala Gly Gln Phe Asn Asp Asn Leu Tyr Gly Thr
690 695 700

Ser Ile Gln Ser Val Arg Ala Val Ala Glu Arg Gly Lys His Cys Ile
705 710 715 720

Leu Asp Val Ser Gly Asn Ala Ile Lys Arg Leu Gln Gln Ala Gln Leu
725 730 735

Tyr Pro Ile Ala Ile Phe Ile Lys Pro Lys Ser Ile Glu Ala Leu Met
740 745 750

Glu Met Asn Arg Arg Gln Thr Tyr Glu Gln Ala Asn Lys Ile Tyr Asp
755 760 765

Lys Ala Met Lys Leu Glu Gln Glu Phe Gly Glu Tyr Phe Thr Ala Ile
770 775 780

Val Gln Gly Asp Ser Leu Glu Glu Ile Tyr Asn Lys Ile Lys Gln Ile
785 790 795 800

Ile Glu Asp Gln Ser Gly His Tyr Ile Trp Val Pro Ser Pro Glu Lys
805 810 815

Leu

<210> 306

<211> 674

<212> PRT

<213> Homo sapiens

<220>

<221> MISC_FEATURE

<222> (562)..(562)

<223> Xaa is uncertain

<400> 306

Met Arg Ala Thr His Gly Ser Asn Ser Leu Pro Ser Ser Ala Arg Leu
1 5 10 15

Sequence listing as filed1.txt

Gly Ser Ser Ser Asn Leu Gln Phe Lys Ala Glu Arg Ile Lys Ile Pro
20 25 30

Ser Thr Pro Arg Tyr Pro Arg Ser Val Val Gly Ser Glu Arg Gly Ser
35 40 45

Val Ser His Ser Glu Cys Ser Thr Pro Pro Gln Ser Pro Leu Asn Ile
50 55 60

Asp Thr Leu Ser Ser Cys Ser Gln Ser Gln Thr Ser Ala Ser Thr Leu
65 70 75 80

Pro Arg Ile Ala Val Asn Pro Ala Ser Leu Gly Glu Arg Arg Lys Asp
85 90 95

Arg Pro Tyr Val Glu Glu Pro Arg His Val Lys Val Gln Lys Gly Ser
100 105 110

Glu Pro Leu Gly Ile Ser Ile Val Ser Gly Glu Lys Gly Gly Ile Tyr
115 120 125

Val Ser Lys Val Thr Val Gly Ser Ile Ala His Gln Ala Gly Leu Glu
130 135 140

Tyr Gly Asp Gln Leu Leu Glu Phe Asn Gly Ile Asn Leu Arg Ser Ala
145 150 155 160

Thr Glu Gln Gln Ala Arg Leu Ile Ile Gly Gln Gln Cys Asp Thr Ile
165 170 175

Thr Ile Leu Ala Gln Tyr Asn Pro His Val His Gln Leu Ser Ser His
180 185 190

Ser Arg Ser Ser Ser His Leu Asp Pro Ala Gly Thr His Ser Thr Leu
195 200 205

Gln Gly Ser Gly Thr Thr Thr Pro Glu His Pro Ser Val Ile Asp Pro
210 215 220

Leu Met Glu Gln Asp Glu Gly Pro Ser Thr Pro Pro Ala Lys Gln Ser
225 230 235 240

Ser Ser Arg Ile Ala Gly Asp Ala Asn Lys Lys Thr Leu Glu Pro Arg
245 250 255

Val Val Phe Ile Lys Lys Ser Gln Leu Glu Leu Gly Val His Leu Cys
260 265 270

Sequence listing as filed1.txt

Gly Gly Asn Leu His Gly Val Phe Val Ala Glu Val Glu Asp Asp Ser
275 280 285

Pro Ala Lys Gly Pro Asp Gly Leu Val Pro Gly Asp Leu Ile Leu Glu
290 295 300

Tyr Gly Ser Leu Asp Val Arg Asn Lys Thr Val Glu Glu Val Tyr Val
305 310 315 320

Glu Met Leu Lys Pro Arg Asp Gly Val Arg Leu Lys Val Gln Tyr Arg
325 330 335

Pro Glu Glu Phe Thr Lys Ala Lys Gly Leu Pro Gly Asp Ser Phe Tyr
340 345 350

Ile Arg Ala Leu Tyr Asp Arg Leu Ala Asp Val Glu Gln Glu Leu Ser
355 360 365

Phe Lys Lys Asp Asp Ile Leu Tyr Val Asp Asp Thr Leu Pro Gln Gly
370 375 380

Thr Phe Gly Ser Trp Met Ala Trp Gln Leu Asp Glu Asn Ala Gln Lys
385 390 395 400

Ile Gln Arg Gly Gln Ile Pro Ser Lys Tyr Val Met Asp Gln Glu Phe
405 410 415

Ser Arg Arg Leu Ser Met Ser Glu Val Lys Asp Asp Asn Ser Ala Thr
420 425 430

Lys Thr Leu Ser Ala Ala Ala Arg Arg Ser Phe Phe Arg Arg Lys His
435 440 445

Lys His Lys Arg Ser Gly Ser Lys Asp Gly Lys Asp Leu Leu Ala Leu
450 455 460

Asp Ala Phe Ser Ser Asp Ser Ile Pro Leu Phe Glu Asp Ser Val Ser
465 470 475 480

Leu Ala Tyr Gln Arg Val Gln Lys Val Asp Cys Thr Ala Leu Arg Pro
485 490 495

Val Leu Ile Leu Gly Pro Leu Leu Asp Val Val Lys Glu Met Leu Val
500 505 510

Asn Glu Ala Pro Gly Lys Phe Cys Arg Cys Pro Leu Glu Val Met Lys
515 520 525

Sequence listing as filed1.txt

Ala Ser Gln Gln Ala Ile Glu Arg Gly Val Lys Asp Cys Leu Phe Val
530 535 540

Asp Tyr Lys Arg Arg Ser Gly His Phe Asp Val Thr Thr Val Ala Ser
545 550 555 560

Ile Xaa Glu Ile Thr Glu Lys Asn Arg His Cys Leu Leu Asp Ile Ala
565 570 575

Pro His Ala Ile Glu Arg Leu His His Met His Ile Tyr Pro Ile Val
580 585 590

Ile Phe Ile His Tyr Lys Ser Ala Lys His Ile Lys Glu Gln Arg Asp
595 600 605

Pro Ile Tyr Leu Arg Asp Lys Val Thr Gln Arg His Ser Lys Glu Gln
610 615 620

Phe Glu Ala Ala Gln Lys Leu Glu Gln Glu Tyr Ser Arg Tyr Phe Thr
625 630 635 640

Gly Val Ile Gln Gly Gly Ala Leu Ser Ser Ile Cys Thr Gln Ile Leu
645 650 655

Ala Met Val Asn Gln Glu Gln Asn Lys Val Leu Trp Ile Pro Ala Cys
660 665 670

Pro Leu